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**FEBRUARY 3, 2020** 

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**Virginia Code Commission** 

http://register.dls.virginia.gov

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### VIRGINIA REGISTER INFORMATION PAGE

**THE VIRGINIA REGISTER OF REGULATIONS** is an official state publication issued every other week throughout the year. Indexes are published quarterly, and are cumulative for the year. The *Virginia Register* has several functions. The new and amended sections of regulations, both as proposed and as finally adopted, are required by law to be published in the *Virginia Register*. In addition, the *Virginia Register* is a source of other information about state government, including petitions for rulemaking, emergency regulations, executive orders issued by the Governor, and notices of public hearings on regulations.

#### ADOPTION, AMENDMENT, AND REPEAL OF REGULATIONS

An agency wishing to adopt, amend, or repeal regulations must first publish in the *Virginia Register* a notice of intended regulatory action; a basis, purpose, substance and issues statement; an economic impact analysis prepared by the Department of Planning and Budget; the agency's response to the economic impact analysis; a summary; a notice giving the public an opportunity to comment on the proposal; and the text of the proposed regulation.

Following publication of the proposal in the Virginia Register, the promulgating agency receives public comments for a minimum of 60 days. The Governor reviews the proposed regulation to determine if it is necessary to protect the public health, safety and welfare, and if it is clearly written and easily understandable. If the Governor chooses to comment on the proposed regulation, his comments must be transmitted to the agency and the Registrar no later than 15 days following the completion of the 60-day public comment period. The Governor's comments, if any, will be published in the *Virginia Register*. Not less than 15 days following the completion of the 60-day public comment period, the agency may adopt the proposed regulation.

The Joint Commission on Administrative Rules (JCAR) or the appropriate standing committee of each house of the General Assembly may meet during the promulgation or final adoption process and file an objection with the Registrar and the promulgating agency. The objection will be published in the *Virginia Register*. Within 21 days after receipt by the agency of a legislative objection, the agency shall file a response with the Registrar, the objecting legislative body, and the Governor.

When final action is taken, the agency again publishes the text of the regulation as adopted, highlighting all changes made to the proposed regulation and explaining any substantial changes made since publication of the proposal. A 30-day final adoption period begins upon final publication in the *Virginia Register*.

The Governor may review the final regulation during this time and, if he objects, forward his objection to the Registrar and the agency. In addition to or in lieu of filing a formal objection, the Governor may suspend the effective date of a portion or all of a regulation until the end of the next regular General Assembly session by issuing a directive signed by a majority of the members of the appropriate legislative body and the Governor. The Governor's objection or suspension of the regulation, or both, will be published in the *Virginia Register*. If the Governor finds that changes made to the proposed regulation have substantial impact, he may require the agency to provide an additional 30-day public comment period on the changes. Notice of the additional public comment period required by the Governor will be published in the *Virginia Register*.

The agency shall suspend the regulatory process for 30 days when it receives requests from 25 or more individuals to solicit additional public comment, unless the agency determines that the changes have minor or inconsequential impact.

A regulation becomes effective at the conclusion of the 30-day final adoption period, or at any other later date specified by the promulgating agency, unless (i) a legislative objection has been filed, in which event the regulation, unless withdrawn, becomes effective on the date specified, which shall be after the expiration of the 21-day objection period; (ii) the Governor exercises his authority to require the agency to provide for additional public comment, in which event the regulation,

unless withdrawn, becomes effective on the date specified, which shall be after the expiration of the period for which the Governor has provided for additional public comment; (iii) the Governor and the General Assembly exercise their authority to suspend the effective date of a regulation until the end of the next regular legislative session; or (iv) the agency suspends the regulatory process, in which event the regulation, unless withdrawn, becomes effective on the date specified, which shall be after the expiration of the 30-day public comment period and no earlier than 15 days from publication of the readopted action.

A regulatory action may be withdrawn by the promulgating agency at any time before the regulation becomes final.

#### FAST-TRACK RULEMAKING PROCESS

Section 2.2-4012.1 of the Code of Virginia provides an exemption from certain provisions of the Administrative Process Act for agency regulations deemed by the Governor to be noncontroversial. To use this process, Governor's concurrence is required and advance notice must be provided to certain legislative committees. Fast-track regulations will become effective on the date noted in the regulatory action if no objections to using the process are filed in accordance with § 2.2-4012.1.

#### EMERGENCY REGULATIONS

Pursuant to § 2.2-4011 of the Code of Virginia, an agency, upon consultation with the Attorney General, and at the discretion of the Governor, may adopt emergency regulations that are necessitated by an emergency situation. An agency may also adopt an emergency regulation when Virginia statutory law or the appropriation act or federal law or federal regulation requires that a regulation be effective in 280 days or less from its enactment. The emergency regulation becomes operative upon its adoption and filing with the Registrar of Regulations, unless a later date is specified. Emergency regulations are limited to no more than 18 months in duration; however, may be extended for six months under certain circumstances as provided for in § 2.2-4011 D. Emergency regulations are published as soon as possible in the Register. During the time the emergency status is in effect, the agency may proceed with the adoption of permanent regulations through the usual procedures. To begin promulgating the replacement regulation, the agency must (i) file the Notice of Intended Regulatory Action with the Registrar within 60 days of the effective date of the emergency regulation and (ii) file the proposed regulation with the Registrar within 180 days of the effective date of the emergency regulation. If the agency chooses not to adopt the regulations, the emergency status ends when the prescribed time limit expires.

#### STATEMENT

The foregoing constitutes a generalized statement of the procedures to be followed. For specific statutory language, it is suggested that Article 2 (§ 2.2-4006 et seq.) of Chapter 40 of Title 2.2 of the Code of Virginia be examined carefully.

#### CITATION TO THE VIRGINIA REGISTER

The *Virginia Register* is cited by volume, issue, page number, and date. **34:8 VA.R. 763-832 December 11, 2017,** refers to Volume 34, Issue 8, pages 763 through 832 of the *Virginia Register* issued on December 11, 2017.

The Virginia Register of Regulations is published pursuant to Article 6 (§ 2.2-4031 et seq.) of Chapter 40 of Title 2.2 of the Code of Virginia.

Members of the Virginia Code Commission: John S. Edwards, Chair; James A. "Jay" Leftwich, Vice Chair; Ryan T. McDougle; Nicole Cheuk; Rita Davis; Leslie L. Lilley; Thomas M. Moncure, Jr.; Christopher R. Nolen; Charles S. Sharp; Samuel T. Towell; Malfourd W. Trumbo.

<u>Staff of the Virginia Register:</u> Karen Perrine, Registrar of Regulations; Anne Bloomsburg, Assistant Registrar; Nikki Clemons, Regulations Analyst; Rhonda Dyer, Publications Assistant; Terri Edwards, Senior Operations Staff Assistant.

### **PUBLICATION SCHEDULE AND DEADLINES**

This schedule is available on the Virginia Register of Regulations website (http://register.dls.virginia.gov).

#### February 2020 through December 2020

Volume: Issue	Material Submitted By Noon*	Will Be Published On
36:14	February 12. 2020	March 2, 2020
36:15	February 26, 2020	March 16, 2020
36:16	March 11, 2020	March 30, 2020
36:17	March 25, 2020	April 13, 2020
36:18	April 8, 2020	April 27, 2020
36:19	April 22. 2020	May 11, 2020
36:20	May 6, 2020	May 25, 2020
36:21	May 20, 2020	June 8, 2020
36:22	June 3, 2020	June 22, 2020
36:23	June 17, 2020	July 6, 2020
36:24	July 1, 2020	July 20, 2020
36:25	July 15, 2020	August 3, 2020
36:26	July 29, 2020	August 17, 2020
37:1	August 12, 2020	August 31, 2020
37:2	August 26, 2020	September 14, 2020
37:3	September 9, 2020	September 28, 2020
37:4	September 23, 2020	October 12, 2020
37:5	October 7, 2020	October 26, 2020
37:6	October 21, 2020	November 9, 2020
37:7	November 4, 2020	November 23, 2020
37:8	November 16, 2020 (Monday)	December 7, 2020
37:9	December 2, 2020	December 21, 2020

<sup>\*</sup>Filing deadlines are Wednesdays unless otherwise specified.

### PERIODIC REVIEWS AND SMALL BUSINESS IMPACT REVIEWS

#### **TITLE 9. ENVIRONMENT**

#### STATE WATER CONTROL BOARD

#### Report of Findings

Pursuant to § 2.2-4007.1 of the Code of Virginia, the State Water Control Board conducted a small business impact review of **9VAC25-390**, **Water Resources Policy**, and determined that this regulation should be amended.

The final regulatory action to amend 9VAC25-390, which is published in this issue of the Virginia Register, serves as the report of findings.

Agency Contact: Melissa Porterfield, Department of Environmental Quality, 1111 East Main Street, Suite 1400, P.O. Box 1105, Richmond, VA 23218, telephone (803) 698-4238, or email melissa.porterfield@deq.virginia.gov.

#### Report of Findings

Pursuant to § 2.2-4007.1 of the Code of Virginia, the State Water Control Board conducted a small business impact review of **9VAC25-401**, **Sewage Treatment in the Dulles Area Watershed**, and determined that this regulation should be amended.

The final regulatory action to amend 9VAC25-401, which is published in this issue of the Virginia Register, serves as the report of findings.

Agency Contact: Melissa Porterfield, Department of Environmental Quality, 1111 East Main Street, Suite 1400, P.O. Box 1105, Richmond, VA 23218, telephone (803) 698-4238, or email melissa.porterfield@deq.virginia.gov.

#### **Agency Notice**

Pursuant to Executive Order 14 (as amended July 16, 2018) and §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, 9VAC25-820, General Virginia Pollutant Discharge Elimination System (VPDES) Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia, is undergoing a periodic review. The review of the regulation will be guided by the principles in Executive Order 14 (as amended July 16, 2018).

The Notice of Intended Regulatory Action for 9VAC25-820, which is published in this issue of the Virginia Register, serves as the announcement of the periodic review.

Agency Contact: Emilee Adamson, Department of Environmental Quality, 1111 East Main Street, Suite 1400, P.O. Box 1105, Richmond, VA 23218, telephone (804) 698-4355, FAX (804) 698-4032, or email emilee.adamson@deq.virginia.gov.

#### **TITLE 13. HOUSING**

# BOARD OF HOUSING AND COMMUNITY DEVELOPMENT

#### **Report of Findings**

Pursuant to § 2.2-4007.1 of the Code of Virginia, the Board of Housing and Community Development conducted a small business impact review of 13VAC5-31, Virginia Amusement Device Regulations, and determined that this regulation should be amended.

The proposed regulatory action to amend 13VAC5-31, which is published in this issue of the Virginia Register, serves as the report of findings.

Agency Contact: Kyle Flanders, Senior Policy Analyst, Department of Housing and Community Development, Main Street Centre, 600 East Main Street, Suite 300, Richmond, VA 23219, telephone (804) 786-6761, FAX (804) 371-7090, TTY (804) 371-7089, or email kyle.flanders@dhcd.virginia.gov.

#### **Report of Findings**

Pursuant to § 2.2-4007.1 of the Code of Virginia, the Board of Housing and Community Development conducted a small business impact review of 13VAC5-51, Virginia Statewide Fire Prevention Code, and determined that this regulation should be amended.

The proposed regulatory action to amend 13VAC5-51, which is published in this issue of the Virginia Register, serves as the report of findings.

Agency Contact: Kyle Flanders, Senior Policy Analyst, Department of Housing and Community Development, Main Street Centre, 600 East Main Street, Suite 300, Richmond, VA 23219, telephone (804) 786-6761, FAX (804) 371-7090, TTY (804) 371-7089, or email kyle.flanders@dhcd.virginia.gov.

#### Report of Findings

Pursuant to § 2.2-4007.1 of the Code of Virginia, the Board of Housing and Community Development conducted a small business impact review of **13VAC5-63**, **Virginia Uniform Statewide Building Code**, and determined that this regulation should be amended.

The proposed regulatory action to amend 13VAC5-63, which is published in this issue of the Virginia Register, serves as the report of findings.

Agency Contact: Kyle Flanders, Senior Policy Analyst, Department of Housing and Community Development, Main Street Centre, 600 East Main Street, Suite 300, Richmond, VA 23219, telephone (804) 786-6761, FAX (804) 371-7090,



### Periodic Reviews and Small Business Impact Reviews

TTY (804) 371-7089, or email kyle.flanders@dhcd.virginia.gov.

#### Report of Findings

Pursuant to § 2.2-4007.1 of the Code of Virginia, the Board of Housing and Community Development conducted a small business impact review of 13VAC5-91, Virginia Industrialized Building Safety Regulations, and determined that this regulation should be amended.

The proposed regulatory action to amend 13VAC5-91, which is published in this issue of the Virginia Register, serves as the report of findings.

Agency Contact: Kyle Flanders, Senior Policy Analyst, Department of Housing and Community Development, Main Street Centre, 600 East Main Street, Suite 300, Richmond, VA 23219, telephone (804) 786-6761, FAX (804) 371-7090, TTY (804) 371-7089, or email kyle.flanders@dhcd.virginia.gov.

# Agency Contact: Tammy Trestrail, Department of Social Services, 801 East Main Street, Richmond, VA 23219, telephone (804) 726-7132, or email tammy.trestrail@dss.virginia.gov.

#### **TITLE 22. SOCIAL SERVICES**

# STATE BOARD OF SOCIAL SERVICES Agency Notice

Pursuant to Executive Order 14 (as amended July 16, 2018) and §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, **22VAC40-131, Standards for Licensed Child-Placing Agencies**, is undergoing a periodic review. The review of the regulation will be guided by the principles in Executive Order 14 (as amended July 16, 2018).

The Notice of Intended Regulatory Action for 22VAC40-131, which is published in this issue of the Virginia Register, serves as the announcement of the periodic review.

Agency Contact: Tammy Trestrail, Department of Social Services, 801 East Main Street, Richmond, VA 23219, telephone (804) 726-7132, or email tammy.trestrail@dss.virginia.gov.

#### **Agency Notice**

Pursuant to Executive Order 14 (as amended July 16, 2018) and §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, **22VAC40-151, Standards for Licensed Children's Residential Facilities**, is undergoing a periodic review. The review of the regulation will be guided by the principles in Executive Order 14 (as amended July 16, 2018).

The Notice of Intended Regulatory Action for 22VAC40-151, which is published in this issue of the Virginia Register, serves as the announcement of the periodic review.

### NOTICES OF INTENDED REGULATORY ACTION

#### **TITLE 9. ENVIRONMENT**

#### STATE WATER CONTROL BOARD

#### **Notice of Intended Regulatory Action**

Notice is hereby given in accordance with § 2.2-4007.01 of the Code of Virginia that the State Water Control Board intends to consider amending 9VAC25-820, General Virginia Pollutant Discharge Elimination (VPDES) Watershed Permit Regulation for Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia. The purpose of the proposed action is to amend and reissue the existing general permit that expires on December 31, 2021. The general permit governs facilities holding individual VPDES permits that discharge or propose to discharge total nitrogen or total phosphorus to the Chesapeake Bay or its tributaries. The facilities are authorized to discharge to surface waters and exchange credits for total nitrogen or total phosphorus. The permit must be reissued to continue making the permit available after December 31, 2021.

In addition, this regulation will undergo a periodic review pursuant to Executive Order 14 (as amended July 16, 2018) and a small business impact review pursuant to § 2.2-4007.1 of the Code of Virginia to determine whether this regulation should be repealed, amended, or retained in its current form. Public comment is sought on the review of any issue relating to this regulation, including whether the regulation (i) is necessary for the protection of public health, safety, and welfare or for the economical performance of important governmental functions; (ii) minimizes the economic impact on small businesses in a manner consistent with the stated objectives of applicable law; and (iii) is clearly written and easily understandable.

The agency intends to hold a public hearing on the proposed action after publication in the Virginia Register.

Statutory Authority: § 62.1-44.15 of the Code of Virginia.

Public Comment Deadline: March 4, 2020.

Agency Contact: Emilee Adamson, Department of Environmental Quality, 1111 East Main Street, Suite 1400, P.O. Box 1105, Richmond, VA 23218, telephone (804) 698-4355, FAX (804) 698-4032, or email emilee.adamson@deq.virginia.gov.

VA.R. Doc. No. R20-6288; Filed January 15, 2020, 9:43 a.m.

### **\*** \_\_\_\_\_ **\***

#### **TITLE 12. HEALTH**

# DEPARTMENT OF MEDICAL ASSISTANCE SERVICES

#### Withdrawal of Notice of Intended Regulatory Action

Notice is hereby given in accordance with § 2.2-4007.01 of the Code of Virginia that the Department of Medical Assistance Services has WITHDRAWN the Notice of Intended Regulatory Action (NOIRA) for **12VAC30-60**, **Standards Established and Methods Used to Assure High Quality Care**, which was published in 35:6 VA.R. 956 November 12, 2018.

The NOIRA is unnecessary as the agency is proceeding with this regulatory action through the fast-track rulemaking process under § 2.2-4012.1 of the Code of Virginia. The fast-track rulemaking action was published in 36:6 VA.R. 845-847 November 11, 2019.

<u>Statutory Authority:</u> § 32.1-325 of the Code of Virginia; 42 USC § 1396 et seq.

Agency Contact: Emily McClellan, Regulatory Supervisor, Policy Division, Department of Medical Assistance Services, 600 East Broad Street, Suite 1300, Richmond, VA 23219, telephone (804) 371-4300, FAX (804) 786-1680, or email emily.mcclellan@dmas.virginia.gov.

VA.R. Doc. No. R19-5371; Filed January 7, 2020, 1:20 p.m.



# TITLE 18. PROFESSIONAL AND OCCUPATIONAL LICENSING

#### **BOARD OF NURSING**

#### **Notice of Intended Regulatory Action**

Notice is hereby given in accordance with § 2.2-4007.01 of the Code of Virginia that the Board of Nursing intends to consider amending 18VAC90-27, Regulations for Nursing Education Programs. The purpose of the proposed action is to adopt definitions and qualifications for the use of simulation in lieu of direct client care hours in fulfillment of the clinical hour requirements for nursing education programs. Proposed amendments (i) define terms, (ii) require faculty supervising clinical practice by simulation to have knowledge and skills in the methodology, (iii) clarify that the 50% limitation on the number of clinical hours that can be fulfilled by simulation applies to the hours in different specialties and population groups across the life span, and (iv) require knowledgeable faculty to be present during the simulation experience.

### Notices of Intended Regulatory Action

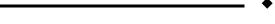
The agency intends to hold a public hearing on the proposed action after publication in the Virginia Register.

<u>Statutory Authority:</u> §§ 54.1-2400 and 54.1-3005 of the Code of Virginia.

Public Comment Deadline: March 4, 2020.

Agency Contact: Jay P. Douglas, R.N., Executive Director, Board of Nursing, 9960 Mayland Drive, Suite 300, Richmond, VA 23233, telephone (804) 367-4520, FAX (804) 527-4455, or email jay.douglas@dhp.virginia.gov.

VA.R. Doc. No. R20-5531; Filed January 7, 2020, 7:14 p.m.



#### **TITLE 22. SOCIAL SERVICES**

# STATE BOARD OF SOCIAL SERVICES Notice of Intended Regulatory Action

Notice is hereby given in accordance with § 2.2-4007.01 of the Code of Virginia that the State Board of Social Services intends to consider amending **22VAC40-131**, **Standards for Licensed Child-Placing Agencies**. The purpose of the proposed action is to align the regulation with federal and state law and regulation, including the federal Foster Connections to Success and Increasing Adoptions Act of 2008, Preventing Sex Trafficking and Strengthening Families Act of 2014, and Family First Prevention Services Act of 2018; Chapters 282, 297, 446, and 688 of the 2019 Acts of Assembly; and Permanency Services-Prevention, Foster Care, Adoption and Independent Living (22VAC40-201) and Foster and Adoptive Home Approval Standards for Local Departments of Social Services (22VAC40-211).

The proposed action will add definitions, clarify requirements, and provide technical edits and any other changes deemed necessary after public comment and review. Proposed substantive amendments include (i) guidelines for foster and adoptive parents to make reasonable and prudent parenting decisions for children in their care; (ii) requirements to provide children and youth in foster care normal life experiences comparable to children and youth who are not in foster care; (iii) delegation of parental and legal custodial powers of children; (iv) service planning and family reunification; (v) treatment-based placement option for children in foster care with behavioral and emotional needs: (vi) prevention of shaken baby syndrome; (vii) updated training requirements for licensed child agency staff and foster and adoptive parents to include reasonable and prudent parenting and normalcy for children and youth in foster care; (viii) foster and adoptive parent mandatory child abuse and neglect reporting requirements; (ix) foster care services for youth released from the Virginia Department of Juvenile Justice who were in foster care immediately prior to commitment; (x) requirements to expand independent living services for eligible youth 18 to 21 years of age; (xi) provision of documents to a child leaving foster care upon reaching 18 years of age; (xii) medical and dental examinations for children in foster care; (xiii) medication management; (xiv) an updated program statement and description requirements; (xv) social history requirements for children younger than one year of age; (xvi) removal of the term "resource" and phrase "resource parent"; (xvii) records management; and (xviii) Fostering Futures Program services for youth who were in foster care on their 18th birthday through 21 years of age.

In addition, this regulation will undergo a periodic review pursuant to Executive Order 14 (as amended July 16, 2018) and a small business impact review pursuant to § 2.2-4007.1 of the Code of Virginia to determine whether this regulation should be repealed, amended, or retained in its current form. Public comment is sought on the review of any issue relating to this regulation, including whether the regulation (i) is necessary for the protection of public health, safety, and welfare or for the economical performance of important governmental functions; (ii) minimizes the economic impact on small businesses in a manner consistent with the stated objectives of applicable law; and (iii) is clearly written and easily understandable.

The agency does not intend to hold a public hearing on the proposed action after publication in the Virginia Register.

Statutory Authority: §§ 63.2-217, 63.2-1701, and 63.2-1734 of the Code of Virginia.

Public Comment Deadline: March 4, 2020.

Agency Contact: Tammy Trestrail, Department of Social Services, 801 East Main Street, Richmond, VA 23219, telephone (804) 726-7132, or email tammy.trestrail@dss.virginia.gov.

VA.R. Doc. No. R20-6138; Filed January 8, 2020, 1:40 p.m.

#### **Notice of Intended Regulatory Action**

Notice is hereby given in accordance with § 2.2-4007.01 of the Code of Virginia that the State Board of Social Services intends to consider amending 22VAC40-151, Standards for Licensed Children's Residential Facilities. The purpose of the proposed action is to align the regulation with the state and the federal Foster Connections to Success and Increasing Adoptions Act of 2008, Preventing Sex Trafficking and Strengthening Families Act of 2014, and the Family First Prevention Services Act of 2018 and update the regulation. Proposed amendments include (i) establishing standards and training for normalcy and reasonable and prudent parenting for children in foster care; (ii) updating annual training requirements; (iii) adding training requirements that cover topics such as shaken baby syndrome and behavioral interventions for infants and toddlers residing with their parents; (iv) updating relief staff requirements; (v) adding a

### Notices of Intended Regulatory Action

requirement to review and update the behavior support plan; (vi) clarifying fire inspection requirements; (vii) updating and clarifying responsibilities to ensure educational needs of children are met; (viii) adding a requirement that religious participation policies be provided to children and individuals or agencies prior to admission to the facility; and (ix) adding definitions, clarifying language, and making technical edits necessary for clarification of existing requirements and any other changes deemed necessary after public comment and review.

In addition, this regulation will undergo a periodic review pursuant to Executive Order 14 (as amended July 16, 2018) and a small business impact review pursuant to § 2.2-4007.1 of the Code of Virginia to determine whether this regulation should be repealed, amended, or retained in its current form. Public comment is sought on the review of any issue relating to this regulation, including whether the regulation (i) is necessary for the protection of public health, safety, and welfare or for the economical performance of important governmental functions; (ii) minimizes the economic impact on small businesses in a manner consistent with the stated objectives of applicable law; and (iii) is clearly written and easily understandable.

The agency does not intend to hold a public hearing on the proposed action after publication in the Virginia Register.

<u>Statutory Authority:</u> §§ 63.2-217 and 63.2-1737 of the Code of Virginia.

Public Comment Deadline: March 4, 2020.

Agency Contact: Tammy Trestrail, Department of Social Services, 801 East Main Street, Richmond, VA 23219, telephone (804) 726-7132, or email tammy.trestrail@dss.virginia.gov.

 $VA.R.\ Doc.\ No.\ R20\text{-}6139;\ Filed\ January\ 8,\ 2020,\ 1\text{:}40\ p.m.$ 





# TITLE 24. TRANSPORTATION AND MOTOR VEHICLES

# COMMISSION ON THE VIRGINIA ALCOHOL SAFETY ACTION PROGRAM

#### **Notice of Intended Regulatory Action**

Notice is hereby given in accordance with § 2.2-4007.01 of the Code of Virginia that the Commission on the Virginia Alcohol Safety Action Program intends to consider amending **24VAC35-60**, **Ignition Interlock Program Regulations**. The primary purpose of the proposed action is to amend the regulations to incorporate the use of global positioning system technology to more effectively detect and prosecute ignition interlock circumvention cases. Other proposed amendments include (i) adding conditions under which an

ignition interlock service provider or technician may be decertified for cause; (ii) bringing the decertification appeal process into compliance with the Administrative Process Act; and (iii) making other minor changes with regard to ignition interlock device operation, installation, and calibration.

The agency does not intend to hold a public hearing on the proposed action after publication in the Virginia Register.

Statutory Authority: § 18.2 -270.2 of the Code of Virginia.

Public Comment Deadline: March 4, 2020.

Agency Contact: Richard Foy, Field Service Specialist, Commission on the Virginia Alcohol Safety Action Program, 701 East Franklin Street, Suite 1110, Richmond, VA 23219, telephone (804) 786-5895, or email rfoy@vasap.virginia.gov.

VA.R. Doc. No. R20-6270; Filed January 13, 2020, 3:39 p.m.

### **REGULATIONS**

For information concerning the different types of regulations, see the Information Page.

#### Symbol Key

Roman type indicates existing text of regulations. Underscored language indicates proposed new text.

Language that has been stricken indicates proposed text for deletion. Brackets are used in final regulations to indicate changes from the proposed regulation.

#### TITLE 9. ENVIRONMENT

#### STATE AIR POLLUTION CONTROL BOARD

#### **Final Regulation**

REGISTRAR'S NOTICE: The State Air Pollution Control Board is claiming an exemption from Article 2 of the Administrative Process Act in accordance with § 2.2-4006 A 3, which excludes regulations that consist only of changes in style or form or corrections of technical errors. The State Air Pollution Control Board will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

# <u>Title of Regulation:</u> **9VAC5-20. General Provisions** (Rev. E19) (amending **9VAC5-20-21**).

<u>Statutory Authority:</u> § 10.1-1308 of the Code of Virginia; §§ 108, 109, 110, and 182 of the Clean Air Act; 40 CFR Parts 50, 53, and 58.

Effective Date: March 4, 2020.

Agency Contact: Karen G. Sabasteanski, Department of Environmental Quality, 1111 East Main Street, Suite 1400, P.O. Box 1105, Richmond, VA 23218, telephone (804) 698-4426, FAX (804) 698-4510, or email karen.sabasteanski@deq.virginia.gov.

Background: Section 10.1-1307.03 of the Code of Virginia requires that the State Air Pollution Control Board adopt regulations to implement and enforce the requirements of § 328 of the federal Clean Air Act relating to requirements to control air pollution from Outer Continental Shelf sources located offshore of the Commonwealth. The regulations may not differ materially from the regulations promulgated by the Environmental Protection Agency implementing § 328 of the Clean Air Act (40 CFR Part 55). Accordingly, 9VAC5-20-21 (Documents Incorporated by Reference) was amended to add 40 CFR Part 55. Subsequently, EPA informed the department that three specific sections of 40 CFR Part 55, that is, § 55.5 (Corresponding onshore area designation), (Delegation), and § 55.12 (Consistency Updates), were not delegable to the states. 40 CFR 55.11(a) states that the authority to implement and enforce those provisions will not be delegated by EPA.

#### Summary:

The amendment clarifies that 40 CFR §§ 55.5, 55.11, and 55.12 are not incorporated by reference into 9VAC5-20 by

adding the sections as exceptions to the incorporation of 40 CFR Part 55.

#### 9VAC5-20-21. Documents incorporated by reference.

- A. The Administrative Process Act and Virginia Register Act provide that state regulations may incorporate documents by reference. Throughout these regulations, documents of the types specified below have been incorporated by reference.
  - 1. United States Code.
  - 2. Code of Virginia.
  - 3. Code of Federal Regulations.
  - 4. Federal Register.
  - 5. Technical and scientific reference documents.

Additional information on key federal regulations and nonstatutory documents incorporated by reference and their availability may be found in subsection E of this section.

- B. Any reference in these regulations to any provision of the Code of Federal Regulations (CFR) shall be considered as the adoption by reference of that provision. The specific version of the provision adopted by reference shall be that contained in the CFR (2016) in effect July 1, 2016. For the purposes of Article 43.1 (9VAC5-40-5925 et seq.) of 9VAC5-40 (Existing Stationary Sources), the EPA regulations promulgated at Subpart Cf (40 CFR 60.30f et seq., Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills) of 40 CFR Part 60, as published in the Federal Register of August 29, 2016 (81 FR 59276) and effective on October 28, 2016, is the version incorporated by reference into this article and Article 43.1. In making reference to the Code of Federal Regulations, 40 CFR Part 35 means Part 35 of Title 40 of the Code of Federal Regulations; 40 CFR 35.20 means § 35.20 in Part 35 of Title 40 of the Code of Federal Regulations.
- C. Failure to include in this section any document referenced in the regulations shall not invalidate the applicability of the referenced document.
- D. Copies of materials incorporated by reference in this section may be examined by the public at the central office of the Department of Environmental Quality, 1111 East Main Street, Suite 1400, Richmond, Virginia, between 8:30 a.m. and 4:30 p.m. of each business day.
- E. Information on federal regulations and nonstatutory documents incorporated by reference and their availability may be found below in this subsection.

- 1. Code of Federal Regulations.
  - a. The provisions specified below from the Code of Federal Regulations (CFR) are incorporated herein by reference.
  - (1) 40 CFR Part 50 -- National Primary and Secondary Ambient Air Quality Standards.
  - (a) Appendix A-1 -- Reference Measurement Principle and Calibration Procedure for the Measurement of Sulfur Dioxide in the Atmosphere (Ultraviolet Fluorescence Method).
  - (b) Appendix A-2 -- Reference Method for the Determination of Sulfur Dioxide in the Atmosphere (Pararosaniline Method).
  - (c) Appendix B -- Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High-Volume Method).
  - (d) Appendix C -- Measurement Principle and Calibration Procedure for the Continuous Measurement of Carbon Monoxide in the Atmosphere (Non-Dispersive Infrared Photometry).
  - (e) Appendix D -- Measurement Principle and Calibration Procedure for the Measurement of Ozone in the Atmosphere.
  - (f) Appendix E -- Reserved.
  - (g) Appendix F -- Measurement Principle and Calibration Procedure for the Measurement of Nitrogen Dioxide in the Atmosphere (Gas Phase Chemiluminescence).
  - (h) Appendix G -- Reference Method for the Determination of Lead in Suspended Particulate Matter Collected from Ambient Air.
  - (i) Appendix H -- Interpretation of the National Ambient Air Quality Standards for Ozone.
  - (j) Appendix I -- Interpretation of the 8-Hour Primary and Secondary National Ambient Air Quality Standards for Ozone.
  - (k) Appendix J -- Reference Method for the Determination of Particulate Matter as  $PM_{10}$  in the Atmosphere.
  - (l) Appendix K -- Interpretation of the National Ambient Air Quality Standards for Particulate Matter.
  - (m) Appendix L -- Reference Method for the Determination of Fine Particulate Matter as  $PM_{2.5}$  in the Atmosphere.
  - (n) Appendix M -- Reserved.
  - (o) Appendix N -- Interpretation of the National Ambient Air Quality Standards for  $PM_{2.5}$ .

- (p) Appendix O -- Reference Method for the Determination of Coarse Particulate Matter as PM in the Atmosphere.
- (q) Appendix P -- Interpretation of the Primary and Secondary National Ambient Air Quality Standards for Ozone
- (r) Appendix Q -- Reference Method for the Determination of Lead in Suspended Particulate Matter as  $PM_{10}$  Collected from Ambient Air.
- (s) Appendix R -- Interpretation of the National Ambient Air Quality Standards for Lead.
- (t) Appendix S -- Interpretation of the Primary National Ambient Air Quality Standards for Oxides of Nitrogen (Nitrogen Dioxide).
- (u) Appendix T -- Interpretation of the Primary National Ambient Air Quality Standards for Oxides of Sulfur (Sulfur Dioxide).
- (v) Appendix U -- Interpretation of the Primary and Secondary National Ambient Air Quality Standards for Ozone.
- (2) 40 CFR Part 51 -- Requirements for Preparation, Adoption, and Submittal of Implementation Plans.
- (a) Appendix M -- Recommended Test Methods for State Implementation Plans.
- (b) Appendix S -- Emission Offset Interpretive Ruling.
- (c) Appendix W -- Guideline on Air Quality Models (Revised).
- (d) Appendix Y -- Guidelines for BART Determinations Under the Regional Haze Rule.
- (3) 40 CFR Part 55 -- Outer Continental Shelf Air Regulations, except for §§ 55.5, 55.11, and 55.12.
- (4) 40 CFR Part 58 -- Ambient Air Quality Surveillance.
- Appendix A -- Quality Assurance Requirements for SLAMS, SPMs and PSD Air Monitoring.
- (5) 40 CFR Part 59 -- National Volatile Organic Compound Emission Standards for Consumer and Commercial Products.
- (a) Subpart C -- National Volatile Organic Compound Emission Standards for Consumer Products.
- (b) Subpart D -- National Volatile Organic Compound Emission Standards for Architectural Coatings, Appendix A -- Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings.
- (6) 40 CFR Part 60 -- Standards of Performance for New Stationary Sources.

The specific provisions of 40 CFR Part 60 incorporated by reference are found in Article 5 (9VAC5-50-400 et seq.) of Part II of 9VAC5-50 (New and Modified Stationary Sources).

(7) 40 CFR Part 61 -- National Emission Standards for Hazardous Air Pollutants.

The specific provisions of 40 CFR Part 61 incorporated by reference are found in Article 1 (9VAC5-60-60 et seq.) of Part II of 9VAC5-60 (Hazardous Air Pollutant Sources).

(8) 40 CFR Part 63 -- National Emission Standards for Hazardous Air Pollutants for Source Categories.

The specific provisions of 40 CFR Part 63 incorporated by reference are found in Article 2 (9VAC5-60-90 et seq.) of Part II of 9VAC5-60 (Hazardous Air Pollutant Sources).

- (9) 40 CFR Part 64 -- Compliance Assurance Monitoring.
- (10) 40 CFR Part 72 -- Permits Regulation.
- (11) 40 CFR Part 73 -- Sulfur Dioxide Allowance System.
- (12) 40 CFR Part 74 -- Sulfur Dioxide Opt-Ins.
- (13) 40 CFR Part 75 -- Continuous Emission Monitoring.
- (14) 40 CFR Part 76 -- Acid Rain Nitrogen Oxides Emission Reduction Program.
- (15) 40 CFR Part 77 -- Excess Emissions.
- (16) 40 CFR Part 78 -- Appeal Procedures for Acid Rain Program.
- (17) 40 CFR Part 152 Subpart I -- Classification of Pesticides.
- (18) 49 CFR Part 172 -- Hazardous Materials Table. Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements, Subpart E, Labeling.
- (19) 29 CFR Part 1926 Subpart F -- Fire Protection and Prevention.
- b. Copies may be obtained from Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954; telephone (202) 783-3238.
- 2. U.S. Environmental Protection Agency.
  - a. The following documents from the U.S. Environmental Protection Agency are incorporated herein by reference:
- (1) Reich Test, Atmospheric Emissions from Sulfuric Acid Manufacturing Processes, Public Health Service Publication No. PB82250721, 1980.

- (2) Compilation of Air Pollutant Emission Factors (AP-42). Volume I: Stationary and Area Sources, stock number 055-000-00500-1, 1995; Supplement A, stock number 055-000-00551-6, 1996; Supplement B, stock number 055-000-00565, 1997; Supplement C, stock number 055-000-00587-7, 1997; Supplement D, 1998; Supplement E, 1999.
- (3) "Guidelines for Determining Capture Efficiency" (GD-35), Emissions Monitoring and Analysis Division, Office of Air Quality Planning and Standards, January 9, 1995.
- b. Copies of the document identified in subdivision E 2 a (1) of this section, and Volume I and Supplements A through C of the document identified in subdivision E 2 a (2) of this section, may be obtained from U.S. Department of Commerce, National Information Service, 5285 Port Royal Road, Springfield, VA 22161; telephone 1-800-553-6847. Copies of Supplements D and E of the document identified in subdivision E 2 a (2) of this section may be obtained online from EPA's Technology Transfer Network at http://www.epa.gov/ttn/index.html. Copies document identified in subdivision E 2 a (3) of this section are only available online from EPA's Technology Network Transfer http://www.epa.gov/ttn/emc/guidlnd.html.
- 3. United States government.
  - a. The following document from the United States government is incorporated herein by reference: Standard Industrial Classification Manual, 1987 (U.S. Government Printing Office stock number 041-001-00-314-2).
- b. Copies may be obtained from Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954; telephone (202) 512-1800.
- 4. American Society for Testing and Materials (ASTM).
  - a. The documents specified below from the American Society for Testing and Materials are incorporated herein by reference.
  - (1) D323-99a, "Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method)."
  - (2) D97-96a, "Standard Test Method for Pour Point of Petroleum Products."
  - (3) D129-00, "Standard Test Method for Sulfur in Petroleum Products (General Bomb Method)."
  - (4) D388-99, "Standard Classification of Coals by Rank."
  - (5) D396-98, "Standard Specification for Fuel Oils."
- (6) D975-98b, "Standard Specification for Diesel Fuel Oils."

- (7) D1072-90(1999), "Standard Test Method for Total Sulfur in Fuel Gases."
- (8) D1265-97, "Standard Practice for Sampling Liquefied Petroleum (LP) Gases (Manual Method)."
- (9) D2622-98, "Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry."
- (10) D4057-95(2000), "Standard Practice for Manual Sampling of Petroleum and Petroleum Products."
- (11) D4294-98, "Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectroscopy."
- (12) D523-89, "Standard Test Method for Specular Gloss" (1999).
- (13) D1613-02, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and Related Products" (2002).
- (14) D1640-95, "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature" (1999).
- (15) E119-00a, "Standard Test Methods for Fire Tests of Building Construction Materials" (2000).
- (16) E84-01, "Standard Test Method for Surface Burning Characteristics of Building Construction Materials" (2001).
- (17) D4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films" (1998).
- (18) D86-04b, "Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure" (2004).
- (19) D4359-90, "Standard Test Method for Determining Whether a Material is a Liquid or a Solid" (reapproved 2000).
- (20) E260-96, "Standard Practice for Packed Column Gas Chromatography" (reapproved 2001).
- (21) D3912-95, "Standard Test Method for Chemical Resistance of Coatings Used in Light-Water Nuclear Power Plants" (reapproved 2001).
- (22) D4082-02, "Standard Test Method for Effects of Gamma Radiation on Coatings for Use in Light-Water Nuclear Power Plants."
- (23) F852-99, "Standard Specification for Portable Gasoline Containers for Consumer Use" (reapproved 2006).
- (24) F976-02, "Standard Specification for Portable Kerosine and Diesel Containers for Consumer Use."

- (25) D4457-02, "Standard Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph" (reapproved 2008).
- (26) D3792-05, "Standard Test Method for Water Content of Coatings by Direct Injection Into a Gas Chromatograph."
- (27) D2879-97, "Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope" (reapproved 2007).
- b. Copies may be obtained from American Society for Testing Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959; telephone (610) 832-9585.
- 5. American Petroleum Institute (API).
  - a. The following document from the American Petroleum Institute is incorporated herein by reference: Evaporative Loss from Floating Roof Tanks, API MPMS Chapter 19, April 1, 1997.
  - b. Copies may be obtained from American Petroleum Institute, 1220 L Street, Northwest, Washington, DC 20005; telephone (202) 682-8000.
- 6. American Conference of Governmental Industrial Hygienists (ACGIH).
  - a. The following document from the ACGIH is incorporated herein by reference: 1991-1992 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices (ACGIH Handbook).
  - b. Copies may be obtained from ACGIH, 1330 Kemper Meadow Drive, Suite 600, Cincinnati, OH 45240; telephone (513) 742-2020.
- 7. National Fire Prevention Association (NFPA).
  - a. The documents specified below from the National Fire Prevention Association are incorporated herein by reference.
  - (1) NFPA 385, Standard for Tank Vehicles for Flammable and Combustible Liquids, 2000 Edition.
  - (2) NFPA 30, Flammable and Combustible Liquids Code, 2000 Edition.
  - (3) NFPA 30A, Code for Motor Fuel Dispensing Facilities and Repair Garages, 2000 Edition.
  - b. Copies may be obtained from the National Fire Prevention Association, One Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101; telephone (617) 770-3000.

- 8. American Society of Mechanical Engineers (ASME).
  - a. The documents specified below from the American Society of Mechanical Engineers are incorporated herein by reference.
  - (1) ASME Power Test Codes: Test Code for Steam Generating Units, Power Test Code 4.1-1964 (R1991).
- (2) ASME Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters, 6th edition (1971).
- (3) Standard for the Qualification and Certification of Resource Recovery Facility Operators, ASME QRO-1-1994.
- b. Copies may be obtained from the American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016; telephone (800) 843-2763.
- 9. American Hospital Association (AHA).
  - a. The following document from the American Hospital Association is incorporated herein by reference: An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities, AHA Catalog no. W5-057007, 1993.
- b. Copies may be obtained from American Hospital Association, One North Franklin, Chicago, IL 60606; telephone (800) 242-2626.
- 10. Bay Area Air Quality Management District (BAAQMD).
  - a. The following documents from the Bay Area Air Quality Management District are incorporated herein by reference:
  - (1) Method 41, "Determination of Volatile Organic Compounds in Solvent-Based Coatings and Related Materials Containing Parachlorobenzotrifluoride" (December 20, 1995).
  - (2) Method 43, "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials" (November 6, 1996).
  - b. Copies may be obtained from Bay Area Air Quality Management District, 939 Ellis Street, San Francisco, CA 94109, telephone (415) 771-6000.
- 11. South Coast Air Quality Management District (SCAQMD).
  - a. The following documents from the South Coast Air Quality Management District are incorporated herein by reference:
  - (1) Method 303-91, "Determination of Exempt Compounds," in Manual SSMLLABM, "Laboratory Methods of Analysis for Enforcement Samples" (1996).

- (2) Method 318-95, "Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction," in Manual SSMLLABM, "Laboratory Methods of Analysis for Enforcement Samples" (1996).
- (3) Rule 1174 Ignition Method Compliance Certification Protocol (February 28, 1991).
- (4) Method 304-91, "Determination of Volatile Organic Compounds (VOC) in Various Materials," in Manual SSMLLABM, "Laboratory Methods of Analysis for Enforcement Samples" (1996).
- (5) Method 316A-92, "Determination of Volatile Organic Compounds (VOC) in Materials Used for Pipes and Fittings" in Manual SSMLLABM, "Laboratory Methods of Analysis for Enforcement Samples" (1996).
- (6) "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems," October 3, 1989.
- b. Copies may be obtained from South Coast Air Quality Management District, 21865 E. Copley Drive, Diamond Bar, CA 91765, telephone (909) 396-2000.
- 12. California Air Resources Board (CARB).
  - a. The following documents from the California Air Resources Board are incorporated herein by reference:
- (1) Test Method 510, "Automatic Shut-Off Test Procedure for Spill-Proof Systems and Spill-Proof Spouts" (July 6, 2000).
- (2) Test Method 511, "Automatic Closure Test Procedure for Spill-Proof Systems and Spill-Proof Spouts" (July 6, 2000).
- (3) Method 100, "Procedures for Continuous Gaseous Emission Stack Sampling" (July 28, 1997).
- (4) Test Method 513, "Determination of Permeation Rate for Spill-Proof Systems" (July 6, 2000).
- (5) Method 310, "Determination of Volatile Organic Compounds (VOC) in Consumer Products and Reactive Organic Compounds in Aerosol Coating Products (Including Appendices A and B)" (May 5, 2005).
- (6) California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 8.5, Article 1, § 94503.5 (2003).
- (7) California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 8.5, Article 2, §§ 94509 and 94511 (2003).
- (8) California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 8.5, Article 4, §§ 94540-94555 (2003).

- (9) "Certification Procedure 501 for Portable Fuel Containers and Spill-Proof Spouts, CP-501" (July 26, 2006).
- (10) "Test Procedure for Determining Integrity of Spill-Proof Spouts and Spill-Proof Systems, TP-501" (July 26, 2006).
- (11) "Test Procedure for Determining Diurnal Emissions from Portable Fuel Containers, TP-502" (July 26, 2006).
- b. Copies may be obtained from California Air Resources Board, P.O. Box 2815, Sacramento, CA 95812, telephone (906) 322-3260 or (906) 322-2990.
- 13. American Architectural Manufacturers Association.
  - a. The following documents from the American Architectural Manufacturers Association are incorporated herein by reference:
  - (1) Voluntary Specification 2604-02, "Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels" (2002).
  - (2) Voluntary Specification 2605-02, "Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels" (2002).
  - b. Copies may be obtained from American Architectural Manufacturers Association, 1827 Walden Office Square, Suite 550, Schaumburg, IL 60173, telephone (847) 303-5664.
- 14. American Furniture Manufacturers Association.
- a. The following document from the American Furniture Manufacturers Association is incorporated herein by reference: Joint Industry Fabrics Standards Committee, Woven and Knit Residential Upholstery Fabric Standards and Guidelines (January 2001).
- b. Copies may be obtained from American Furniture Manufacturers Association, P.O. Box HP-7, High Point, NC 27261; telephone (336) 884-5000.
- 15. Petroleum Equipment Institute.
  - a. The following document from the Petroleum Equipment Institute is incorporated herein by reference: Recommended Practices for Installation and Testing of Vapor-Recovery Systems at Vehicle-Fueling Sites, PEI/RP300-09 (2009).
  - b. Copies may be obtained from Petroleum Equipment Institute, 6931 S. 66th E. Avenue, Suite 310, Tulsa, OK 74133; telephone (918) 494-9696; www.pei.org.

- 16. American Architectural Manufacturers Association (AAMA).
  - a. The following documents from the American Architectural Manufacturers Association are incorporated herein by reference:
  - (1) Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels, publication number AAMA 2604-05.
  - (2) Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels, publication number AAMA 2605-05.
  - b. Copies may be obtained from American Architectural Manufacturers Association, 1827 Walden Office Square, Suite 550, Schaumburg, IL 60173-4268; telephone (847) 303-5774.

VA.R. Doc. No. R20-6223; Filed January 6, 2020, 3:13 p.m.

#### **Final Regulation**

REGISTRAR'S NOTICE: The State Air Pollution Control Board is claiming an exemption from Article 2 of the Administrative Process Act in accordance with § 2.2-4006 A 4 b of the Code of Virginia, which excludes regulations that are required by order of any state or federal court of competent jurisdiction where no agency discretion is involved. The board is also claiming an exemption in accordance with § 2.2-4006 A 4 c of the Code of Virginia, which excludes regulations that are necessary to meet the requirements of federal law or regulations, provided such regulations do not differ materially from those required by federal law or regulation. The State Air Pollution Control Board will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

<u>Titles of Regulations:</u> **9VAC5-20. General Provisions** (**Rev. C19**) (**amending 9VAC5-20-204**).

9VAC5-30. Ambient Air Quality Standards (Rev. C19) (amending 9VAC5-30-55).

9VAC5-151. Regulation for Transportation Conformity (Rev. C19) (amending 9VAC5-151-20).

9VAC5-160. Regulation for General Conformity (Rev. C19) (amending 9VAC5-160-30).

Statutory Authority: § 10.1-1308 of the Code of Virginia; §§ 110 and 182 of the Clean Air Act; 40 CFR Part 51 (9VAC5-20-204, 9VAC5-151-20).

§ 10.1-1308 of the Code of Virginia; §§ 108, 109, 110, 182, and 302 of the Clean Air Act; 40 CFR Parts 50, 51, 53, and 58 (9VAC5-30-55).

§ 10.1-1308 of the Code of Virginia; §§ 108, 109, 182, and 302 of the Clean Air Act; 40 CFR Parts 50, 53, and 58 (9VAC5-160-30).

Effective Date: March 4, 2020.

Agency Contact: Karen G. Sabasteanski, Department of Environmental Quality, 1111 East Main Street, Suite 1400, P.O. Box 1105, Richmond, VA 23218, telephone (804) 698-4426, FAX (804) 698-4510, or email karen.sabasteanski@deq.virginia.gov.

Background: On March 6, 2015 (80 FR 12264), the U.S. Environmental Protection Agency (EPA) established a final rule to implement the 2008 ozone National Ambient Air Ouality Standard (NAAOS). This rule addressed a range of nonattainment area state implementation plan requirements for the 2008 NAAQS, including how to address the revoked 1997 NAAOS. Under Revision G16, the Virginia rules (9VAC5-20-204) were amended to call attention to the fact that the 1997 standard no longer had any effect for the purposes of ozone implementation. Revocation of the 1997 standard also meant that transportation and general conformity reviews were no longer needed in 1997 ozone maintenance areas, and the Virginia conformity regulations were amended accordingly. On February 10, 2017, the Department of Environmental Quality officially requested approval of a revision to the Virginia State Implementation Plan (SIP) for the amended regulations. Since the SIP was originally submitted, the U.S. Court of Appeals for the District of Columbia Circuit vacated portions of EPA's final implementation rule on February 16, 2018. Because those provisions were vacated, EPA requested that Virginia officially withdraw the Revision G16 SIP submittal, and the department did so on February 27, 2019.

#### Summary:

The amendments (i) conform regulations to the U.S. Court of Appeals for the District of Columbia Circuit decision and (ii) add 9VAC5-20-204 A 4 to implement the 2015 ozone NAAQS in the Northern Virginia Ozone Nonattainment Area pursuant to 40 CFR 81.309.

#### 9VAC5-20-204. Nonattainment areas.

A. Nonattainment areas are geographically defined below by locality for the criteria pollutants indicated. Following the name of each ozone nonattainment area, in parentheses, is the classification assigned pursuant to § 181(a) of the federal Clean Air Act (42 USC § 7511(a)), 40 CFR 51.903(a), and 40 CFR 51.1103(a).

1. Ozone (1-hour).

Northern Virginia Ozone Nonattainment Area (severe).

Arlington County Fairfax County Loudoun County Prince William County

**Stafford County** 

Alexandria City

Fairfax City

Falls Church City

Manassas City

Manassas Park City

2. Ozone (8-hour, 0.08 ppm).

Northern Virginia Ozone Nonattainment Area (moderate).

Arlington County

Fairfax County

Loudoun County

Prince William County

Alexandria City

Fairfax City

Falls Church City

Manassas City

Manassas Park City

3. Ozone (8-hour, 0.075 ppm).

Northern Virginia Ozone Nonattainment Area (marginal).

Arlington County

Fairfax County

Loudoun County

Prince William County

Alexandria City

Fairfax City

Falls Church City

Manassas City

Manassas Park City

4. Ozone (8-hour, 0.070 ppm).

Northern Virginia Ozone Nonattainment Area (marginal).

**Arlington County** 

Fairfax County

Loudoun County

Prince William County

Alexandria City

Fairfax City

Falls Church City

Manassas City

Manassas Park City

All other pollutants.

None.

B. Subdivision A 1 of this section shall not be effective after June 15, 2005.

C. Subdivision A 2 of this section shall not be effective after April 6, 2015.

#### 9VAC5-30-55. Ozone (8-hour, 0.08 ppm).

- A. The primary and secondary ambient air quality standard is 0.08 parts per million, daily maximum 8-hour average.
- B. Ozone shall be measured by the reference method described in Appendix D of 40 CFR Part 50, or other method designated as such, or by an equivalent method.
- C. The 8-hour primary and secondary ozone ambient air quality standards are met at an ambient air quality monitoring site when the average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.08 ppm, as determined in accordance with Appendix I of 40 CFR Part 50.
- D. The standard set forth in subsection A of this section shall no longer apply after April 6, 2015. Area designations and classifications with respect to the revoked standard set forth in subsection A of this section are set forth in 9VAC5-20-204 A 2.

#### Part II General Provisions

#### 9VAC5-151-20. Applicability.

- A. The provisions of this chapter shall apply to the following actions:
  - 1. Except as provided for in subsection C of this section or 40 CFR 93.126, conformity determinations are required for:
    - a. The adoption, acceptance, approval or support of transportation plans and transportation plan amendments developed pursuant to 23 CFR Part 450 or 49 CFR Part 613 by a MPO or USDOT;
    - b. The adoption, acceptance, approval or support of TIPs and TIP amendments developed pursuant to 23 CFR Part 450 or 49 CFR Part 613 by a MPO or USDOT; and
    - c. The approval, funding, or implementation of FHWA/FTA projects.
  - 2. Conformity determinations are not required under this chapter for individual projects that are not FHWA/FTA projects. However, 40 CFR 93.121 applies to the projects if they are regionally significant.
  - 3. This chapter shall apply to conformity determinations for which the final decision is made on or after the program approval date. For purposes of applying this subdivision, the program approval date of the regulation adopted by the board on March 26, 2007, shall be the date 30 days after the date on which a notice is published in the Virginia Register acknowledging that the administrator has approved the regulation adopted by the board on March 26, 2007.

- B. The provisions of this chapter shall apply in all nonattainment and maintenance areas for transportation-related criteria pollutants for which the area is designated nonattainment or has a maintenance plan. The provisions of this chapter shall not apply in nonattainment and maintenance areas that were designated nonattainment or maintenance under a federal standard that has been revoked (see 9VAC5-20-204-B).
  - 1. The provisions of this chapter apply with respect to emissions of the following criteria pollutants: ozone, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers ( $PM_{10}$ ); and particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers ( $PM_{2.5}$ ).
  - 2. The provisions of this chapter also apply with respect to emissions of the following precursor pollutants:
    - a. Volatile organic compounds (VOCs) and nitrogen oxides (NO $_{\rm X}$ ) in ozone areas;
    - b. NO<sub>X</sub> in nitrogen dioxide areas;
    - c. VOCs or NO<sub>X</sub> or both, in PM<sub>10</sub> areas:
    - (1) If the EPA Regional Administrator or the DEQ Director has made a finding that transportation-related emissions of one or both of these precursors within the nonattainment area are a significant contributor to the  $PM_{10}$  nonattainment problem and has so notified the MPO and USDOT; or
    - (2) If the applicable implementation plan (or implementation plan submission) establishes an approved (or adequate) budget for such emissions as part of the reasonable further progress, attainment or maintenance strategy;
    - d.  $NO_X$  in  $PM_{2.5}$  areas:
    - (1) Unless both the EPA Regional Administrator and the DEQ Director have made a finding that transportation-related emissions of  $NO_X$  within the nonattainment area are not a significant contributor to the  $PM_{2.5}$  nonattainment problem and have so notified the MPO and  $USDOT_{72}$  or
    - (2) The applicable implementation plan (or implementation plan submission) does not establish an approved (or adequate) budget for such emissions as part of the reasonable further progress, attainment or maintenance strategy; and
    - e. VOC, sulfur dioxide ( $S0_2$ ) and/or ammonia ( $NH_3$ ) in  $PM_{2.5}$  areas either:
    - (1) If the EPA Regional Administrator or the DEQ Director has made a finding that transportation-related emissions of any of these precursors within the

nonattainment area are a significant contributor to the  $PM_{2.5}$  nonattainment problem and has so notified the MPO and USDOT; or

- (2) If the applicable implementation plan (or implementation plan submission) establishes an approved (or adequate) budget for such emissions as part of the reasonable further progress, attainment or maintenance strategy.
- 3. The provisions of this chapter apply to PM<sub>2.5</sub> nonattainment and maintenance areas with respect to PM<sub>2.5</sub> from re-entrained road dust if the EPA Regional Administrator or the DEQ Director has made a finding that re-entrained road dust emissions within the area are a significant contributor to the PM<sub>2.5</sub> nonattainment problem and has so notified the MPO and USDOT, or if the applicable implementation plan (or implementation plan submission) includes re-entrained road dust in the approved (or adequate) budget as part of the reasonable further progress, attainment or maintenance strategy. Reentrained road dust emissions are produced by travel on paved and unpaved roads (including emissions from antiskid and deicing materials).
- 4. The provisions of this chapter apply to maintenance areas through the last year of the area's maintenance plan approved under § 175A(b) of the federal Clean Air Act, unless the applicable implementation plan specifies that the provisions of this chapter shall apply for more than 20 years.
- C. In order to receive any FHWA/FTA approved or funding actions, including NEPA approvals, for a project phase subject to this chapter, a currently conforming transportation plan and TIP must be in place at the time of project approval as described in 40 CFR 93.114, except as provided by 40 CFR 93.114(b).
- D. For areas or portions of areas that have been continuously designated attainment or not designated for any National Ambient Air Quality Standard for ozone, CO,  $PM_{10}$ ,  $PM_{2.5}$  or  $NO_2$  since 1990 and are subsequently redesignated to nonattainment or designated nonattainment for any National Ambient Air Quality Standard for any of these pollutants, the provisions of this chapter shall not apply with respect to that National Ambient Air Quality Standard for 12 months following the effective date of final designation to nonattainment for each National Ambient Air Quality Standard for such pollutant.

#### Part II General Provisions

#### 9VAC5-160-30. Applicability.

A. The provisions of this chapter shall apply in all nonattainment and maintenance areas for criteria pollutants for which the area is designated nonattainment or has a

- maintenance plan. Conformity requirements for newly designated nonattainment areas are not applicable until one year after the effective date of the final nonattainment designation for each national ambient air quality standard and pollutant in accordance with § 176(c)(6) of the federal Clean Air Act.
- B. The provisions of this chapter apply with respect to emissions of the following criteria pollutants: ozone, carbon monoxide, nitrogen dioxide, particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM<sub>10</sub>), and particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers (PM<sub>2.5</sub>). The provisions of this chapter shall not apply in nonattainment and maintenance areas that were designated nonattainment or maintenance under a federal standard that has been revoked (see 9VAC5 20 204 B).
- C. The provisions of this chapter apply with respect to emissions of the following precursor pollutants:

#### 1. For ozone:

- a. Nitrogen oxides, unless an area is exempted from nitrogen oxides requirements under § 182(f) of the federal Clean Air Act, and
- b. Volatile organic compounds.
- 2. For  $PM_{10}$ , those pollutants described in the  $PM_{10}$  nonattainment area applicable implementation plan as significant contributors to the  $PM_{10}$  levels.
- 3. For  $PM_{2.5}$ , (i) sulfur dioxide in all  $PM_{2.5}$  nonattainment and maintenance areas, (ii) nitrogen oxides in all  $PM_{2.5}$  nonattainment and maintenance areas unless both the department and EPA determine that it is not a significant precursor, and (iii) volatile organic compounds and ammonia only in  $PM_{2.5}$  nonattainment or maintenance areas where either the department or EPA determines that they are significant precursors.
- D. Conformity determinations for federal actions related to transportation plans, programs, and projects developed, funded, or approved under Title 23 USC or the Federal Transit Act (49 USC § 5301 et seq.) shall meet the procedures and criteria of 9VAC5-151 (Regulation for Transportation Conformity), in lieu of the procedures set forth in this chapter.
- E. For federal actions not covered by subsection D of this section, a conformity determination is required for each criteria pollutant or precursor where the total of direct and indirect emissions of the criteria pollutant or precursor in a nonattainment or maintenance area caused by a federal action would equal or exceed any of the rates in subdivision 1 or 2 of this subsection.
  - 1. For the purposes of this subsection, the following rates apply in nonattainment areas:

	Tons per year
Ozone (VOCs or NO <sub>X</sub> ):	
Serious nonattainment areas	50
Severe nonattainment areas	25
Extreme nonattainment areas	10
Other ozone nonattainment areas outside an ozone transport region	100
Other ozone nonattainment areas inside an ozone transport region:	
VOC	50
$NO_X$	100
Carbon monoxide, all nonattainment areas	100
Sulfur dioxide or nitrogen dioxide, all nonattainment areas	100
PM <sub>10</sub> :	
Moderate nonattainment areas	100
Serious nonattainment areas	70
PM <sub>2.5</sub> (direct emissions, SO <sub>2</sub> , NO <sub>X</sub> , VOC, and ammonia):	
Moderate nonattainment areas	100
Serious nonattainment areas	70
Lead, all nonattainment areas	25

2. For the purposes of this subsection, the following rates apply in maintenance areas:

	Tons per year
Ozone (NO <sub>x</sub> ), sulfur dioxide, or nitrogen dioxide, all maintenance areas	100
Ozone (VOCs):	
Maintenance areas inside an ozone transport region	50
Maintenance areas outside an ozone transport region	100
Carbon monoxide, all maintenance areas	100
PM <sub>10</sub> , all maintenance areas	100
PM <sub>2.5</sub> (direct emissions, SO <sub>2</sub> , NO <sub>X</sub> , VOC, and ammonia):	100
All maintenance areas	100
Lead, all maintenance areas	25

- F. The requirements of this section shall not apply to the following federal actions:
  - 1. Actions where the total of direct and indirect emissions are below the emissions levels specified in subsection E of this section.
  - 2. The following actions which would result in no emissions increase or an increase in emissions that is clearly de minimis:
    - a. Judicial and legislative proceedings.
    - b. Continuing and recurring activities such as permit renewals where activities conducted shall be similar in scope and operation to activities currently being conducted.
    - c. Rulemaking and policy development and issuance.
    - d. Routine maintenance and repair activities, including repair and maintenance of administrative sites, roads, trails, and facilities.
    - e. Civil and criminal enforcement activities, such as investigations, audits, inspections, examinations, prosecutions, and the training of law-enforcement personnel.
    - f. Administrative actions such as personnel actions, organizational changes, debt management, internal agency audits, program budget proposals, and matters relating to administration and collection of taxes, duties, and fees.
    - g. The routine, recurring transportation of materiel and personnel.
    - h. Routine movement of mobile assets, such as ships and aircraft, in home port reassignments and stations (when no new support facilities or personnel are required) to perform as operational groups and for repair or overhaul or both.
    - i. Maintenance dredging and debris disposal where no new depths are required, applicable permits are secured, and disposal shall be at an approved disposal site.
    - j. With respect to existing structures, properties, facilities, and lands where future activities conducted shall be similar in scope and operation to activities currently being conducted at the existing structures, properties, facilities, and lands, actions such as relocation of personnel, disposition of federally-owned existing structures, properties, facilities, and lands, rent subsidies, operation and maintenance cost subsidies, the exercise of receivership or conservatorship authority, assistance in purchasing structures, and the production of coins and currency.
    - k. The granting of leases, licenses such as for exports and trade, permits, and easements where activities conducted

shall be similar in scope and operation to activities currently being conducted.

- 1. Planning, studies, and provision of technical assistance.
- m. Routine operation of facilities, mobile assets, and equipment.
- n. Transfers of ownership, interests, and titles in land, facilities, and real and personal properties, regardless of the form or method of the transfer.
- o. The designation of empowerment zones, enterprise communities, or viticultural areas.
- p. Actions by any of the federal banking agencies or the federal reserve banks, including actions regarding charters, applications, notices, licenses, the supervision or examination of depository institutions or depository institution holding companies, access to the discount window, or the provision of financial services to banking organizations or to any state, agency, or instrumentality of the United States.
- q. Actions by the Board of Governors of the federal reserve system or any federal reserve bank to effect monetary or exchange rate policy.
- r. Actions that implement a foreign affairs function of the United States.
- s. Actions or portions thereof associated with transfers of land, facilities, title, and real properties through an enforceable contract or lease agreement where the delivery of the deed is required to occur promptly after a specific, reasonable condition is met, such as promptly after the land is certified as meeting the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC § 9601 et seq., and where the federal agency does not retain continuing authority to control emissions associated with the lands, facilities, title, or real properties.
- t. Transfers of real property, including land, facilities, and related personal property from a federal entity to another federal entity, and assignments of real property, including land, facilities, and related personal property from a federal entity to another federal entity, for subsequent deeding to eligible applicants.
- u. Actions by the Department of the Treasury to effect fiscal policy and to exercise the borrowing authority of the United States.
- v. Air traffic control activities and adopting approach, departure, and en route procedures for aircraft operations above the mixing height specified in the applicable implementation plan. Where the applicable implementation plan does not specify a mixing height, the federal agency may use the 3,000 feet above ground

- level as a default mixing height, unless the agency demonstrates that use of a different mixing height is appropriate because the change in emissions at and above that height caused by the federal action is de minimis.
- 3. Actions where the emissions are not reasonably foreseeable, such as the following:
  - a. Initial outer continental shelf lease sales which that are made on a broad scale and are followed by exploration and development plans on a project level.
- b. Electric power marketing activities that involve the acquisition, sale, and transmission of electric energy.
- 4. Individual actions which that implement a decision to conduct or carry out a program that has been found to conform to the applicable implementation plan, such as prescribed burning actions which are consistent with a conforming land management plan, that has been found to conform to the applicable implementation plan. The land management plan shall have been found to conform within the past five years.
- G. Notwithstanding the other requirements of this section, a conformity determination is not required for the following federal actions or portions thereof:
  - 1. The portion of an action that includes major or minor new or modified stationary sources that require a permit under the new source review program.
  - 2. Actions in response to emergencies that are typically commenced on the order of hours or days after the emergency and, if applicable, that meet the requirements of subsection H of this section.
  - 3. Research, investigations, studies, demonstrations, or training (other than those exempted under subdivision F 2 of this section), where no environmental detriment is incurred, or the particular action furthers air quality research, as determined by the department.
  - 4. Alteration and additions of existing structures as specifically required by new or existing applicable environmental legislation or environmental regulations (for example, hush houses for aircraft engines and scrubbers for air emissions).
  - 5. Direct emissions from remedial and removal actions carried out under CERCLA and associated regulations to the extent the emissions either comply with the substantive requirements of the new source review program or are exempted from other environmental regulation under the provisions of CERCLA and applicable regulations issued under CERCLA.
- H. Federal actions which that are part of a continuing response to an emergency or disaster under subdivision G 2 of this section and which that are to be taken more than six months after the commencement of the response to the

emergency or disaster under subdivision G 2 of this section are exempt from the requirements of this subsection only if:

- 1. The federal agency taking the actions makes a written determination that, for a specified period not to exceed an additional six months, it is impractical to prepare the conformity analyses which would otherwise be required and the actions cannot be delayed due to overriding concerns for public health and welfare, national security interests, and foreign policy commitments; or
- 2. For actions which that are to be taken after those actions covered by subdivision H 1 of this section, the federal agency makes a new determination as provided in subdivision H 1 of this section, and:
  - a. Provides a draft copy of the written determinations required to affected EPA regional offices, the affected states and air pollution control agencies, and any federally recognized Indian tribal government in the nonattainment or maintenance area. Those organizations shall be allowed 15 days from the beginning of the extension period to comment on the draft determination; and
  - b. Within 30 days after making the determination, publish a notice of the determination by placing a prominent advertisement in a daily newspaper of general circulation in the area affected by the action.
- 3. If additional actions are necessary in response to an emergency or disaster under subdivision G 2 of this section beyond the specified time period in subdivision 2 of this subsection, a federal agency may make a new written determination as described in subdivision 2 of this subsection for as many six-month periods as needed, but in no case shall this exemption extend beyond three sixmonth periods except where an agency provides information to EPA and the department stating that the conditions that gave rise to the emergency exemption continue to exist and how such conditions effectively prevent the agency from conducting a conformity evaluation.
- I. Notwithstanding other requirements of this chapter, actions specified by individual federal agencies that have met the criteria set forth in subdivision J 1, J 2, or J 3 of this section and the procedures set forth in subsection K of this section are presumed to conform, except as provided in subsection M of this section. Actions specified by individual federal agencies as presumed to conform shall not be used in combination with one another when the total direct and indirect emissions from the combination of actions would equal or exceed any of the rates specified in subdivision E 1 or E 2 of this section.
- J. The federal agency shall meet the criteria for establishing activities that are presumed to conform by fulfilling the

requirements set forth in either subdivision 1, 2, or 3 of this subsection.

- 1. The federal agency shall clearly demonstrate, using methods consistent with this regulation, that the total of direct and indirect emissions from the type of activities which would be presumed to conform would not:
  - a. Cause or contribute to any new violation of any standard in any area;
  - b. Interfere with the provisions in the applicable implementation plan for maintenance of any standard;
  - c. Increase the frequency or severity of any existing violation of any standard in any area;
  - d. Delay timely attainment of any standard or any required interim emissions reductions or other milestones in any area including, where applicable, emission levels specified in the applicable implementation plan for purposes of:
  - (1) A demonstration of reasonable further progress;
  - (2) A demonstration of attainment; or
  - (3) A maintenance plan.
- 2. The federal agency shall provide documentation that the total of direct and indirect emissions from the future actions would be below the emission rates for a conformity determination that are established in subsection B of this section, based, for example, on similar actions taken over recent years.
- 3. The federal agency shall clearly demonstrate that the emissions from the type or category of actions and the amount of emissions from the action are included in the applicable implementation plan and the department provides written concurrence that the emissions from the actions along with all other expected emissions in the area will not exceed the emission budget in the applicable implementation plan.
- K. In addition to meeting the criteria for establishing exemptions set forth in subdivision J 1, J 2, or J 3 of this section, the following procedures shall also be complied with to presume that activities shall conform:
  - 1. The federal agency shall identify through publication in the Federal Register its list of proposed activities that are presumed to conform, and the basis for the presumptions. The notice shall clearly identify the type and size of the action that would be presumed to conform and provide criteria for determining if the type and size of action qualifies it for the presumption;
  - 2. The federal agency shall notify the appropriate EPA regional office or offices, department, and local air quality agencies and, where applicable, the lead planning organization, and the metropolitan planning organization

and provide at least 30 days for the public to comment on the list of proposed activities presumed to conform. If the presumed to conform action has regional or national application (e.g., the action will cause emission increases in excess of the de minimis levels identified in subsection E of this section in more than one EPA region), the federal agency, as an alternative to sending it to EPA regional offices, may send the draft conformity determination to EPA, Office of Air Quality Planning and Standards;

- 3. The federal agency shall document its response to all the comments received and make the comments, response, and final list of activities available to the public upon request; and
- 4. The federal agency shall publish the final list of such activities in the Federal Register.
- L. Emissions from the following actions are presumed to conform:
  - 1. Actions at installations with facility-wide emission budgets meeting the requirements in 9VAC5-160-181 provided that the department has included the emission budget in the EPA-approved applicable implementation plan and the emissions from the action along with all other emissions from the installation will not exceed the facility-wide emission budget.
  - 2. Prescribed fires conducted in accordance with a smoke management program that meets the requirements of EPA's Interim Air Quality Policy on Wildland and Prescribed Fires (April 1998) or an equivalent replacement EPA policy.
  - 3. Emissions for actions that the department identifies in the EPA-approved applicable implementation plan as presumed to conform.
- M. Even though an action would otherwise be presumed to conform under subsection I or L of this section, an action shall not be presumed to conform and the requirements of 9VAC5-160-110 through 9VAC5-160-180, 9VAC5-160-182 through 9VAC5-160-184, and 9VAC5-160-190 shall apply to the action if EPA or a third party shows that the action would:
  - 1. Cause or contribute to any new violation of any standard in any area;
  - 2. Interfere with provisions in the applicable implementation plan for maintenance of any standard;
  - 3. Increase the frequency or severity of any existing violation of any standard in any area; or
  - 4. Delay timely attainment of any standard or any required interim emissions reductions or other milestones in any area including, where applicable, emission levels specified in the applicable implementation plan for purposes of (i) a demonstration of reasonable further progress, (ii) a demonstration of attainment, or (iii) a maintenance plan.

N. Any measures used to affect or determine applicability of this chapter, as determined under this section, shall result in projects that are in fact de minimis, shall result in the de minimis levels prior to the time the applicability determination is made, and shall be state or federally enforceable. Any measures that are intended to reduce air quality impacts for this purpose shall be identified (including the identification and quantification of all emission reductions claimed) and the process for implementation (including any necessary funding of the measures and tracking of the emission reductions) and enforcement of the measures shall described, including an implementation schedule containing explicit timelines for implementation. Prior to a determination of applicability, the federal agency making the determination shall obtain written commitments from the appropriate persons or agencies to implement any measures which are identified as conditions for making the determinations. The written commitment shall describe the mitigation measures and the nature of the commitment, in a manner consistent with the previous sentence. After this regulation is approved by EPA, enforceability through the applicable implementation plan of any measures necessary for a determination of applicability shall apply to all persons who agree to reduce direct and indirect emissions associated with a federal action for a conformity applicability determination.

VA.R. Doc. No. R20-6032; Filed January 7, 2020, 8:34 a.m.

#### **Final Regulation**

REGISTRAR'S NOTICE: The State Air Pollution Control Board is claiming an exemption from Article 2 of the Administrative Process Act in accordance with § 2.2-4006 A 4 c of the Code of Virginia, which excludes regulations that are necessary to meet the requirements of federal law or regulations provided such regulations do not differ materially from those required by federal law or regulation. The State Air Pollution Control Board will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

<u>Titles of Regulations:</u> **9VAC5-50. New and Modified Stationary Sources (Rev. D19) (amending 9VAC5-50-400).** 

9VAC5-60. Hazardous Air Pollutant Sources (Rev. D19) (amending 9VAC5-60-60, 9VAC5-60-90).

<u>Statutory Authority:</u> § 10.1-1308 of the Code of Virginia; §§ 110, 111, 123, 129, 171, 172, and 182 of the Clean Air Act; 40 CFR Parts 51 and 60.

Effective Date: March 4, 2020.

Agency Contact: Karen G. Sabasteanski, Department of Environmental Quality, 1111 East Main Street, Suite 1400, P.O. Box 1105, Richmond, VA 23218, telephone (804) 698-4426, or email karen.sabasteanski@deq.virginia.gov.

#### Summary:

The amendments update state regulations that incorporate by reference certain federal regulations to reflect the Code of Federal Regulations as published on July 1, 2019, so that the date of the Code of Federal Regulations book being incorporated by reference is updated to the latest version.

#### Article 5

Environmental Protection Agency Standards of Performance for New Stationary Sources (Rule 5-5)

#### 9VAC5-50-400. General.

The U.S. Environmental Protection Agency Regulations on Standards of Performance for New Stationary Sources (NSPSs), as promulgated in 40 CFR Part 60 and designated in 9VAC5-50-410 are, unless indicated otherwise, incorporated by reference into the regulations of the board as amended by the word or phrase substitutions given in 9VAC5-50-420. The complete text of the subparts in 9VAC5-50-410 incorporated in this regulation by reference is contained in 40 CFR Part 60. The 40 CFR section numbers appearing under each subpart in 9VAC5-50-410 identify the specific provisions of the subpart incorporated by reference. The specific version of the provision adopted by reference shall be that contained in the CFR (2018) (2019) in effect July 1, 2018 2019. In making reference to the Code of Federal Regulations, 40 CFR Part 60 means Part 60 of Title 40 of the Code of Federal Regulations; 40 CFR 60.1 means 60.1 in Part 60 of Title 40 of the Code of Federal Regulations.

#### Part II Emission Standards

#### Article 1

Environmental Protection Agency National Emission Standards for Hazardous Air Pollutants (Rule 6-1)

#### 9VAC5-60-60. General.

The Environmental Protection Agency (EPA) Regulations on National Emission Standards for Hazardous Air Pollutants (NESHAP), as promulgated in 40 CFR Part 61 and designated in 9VAC5-60-70 are, unless indicated otherwise, incorporated by reference into the regulations of the board as amended by the word or phrase substitutions given in 9VAC5-60-80. The complete text of the subparts in 9VAC5-60-70 incorporated in this regulation by reference is contained in 40 CFR Part 61. The 40 CFR section numbers appearing under each subpart in 9VAC5-60-70 identify the specific provisions of the subpart incorporated by reference. The specific version of the provision adopted by reference shall be that contained in the CFR (2018) (2019) in effect July 1, 2018 2019. In making reference to the Code of Federal Regulations, 40 CFR Part 61 means Part 61 of Title 40 of the Code of Federal Regulations; 40 CFR 61.01 means 61.01 in Part 61 of Title 40 of the Code of Federal Regulations.

#### Article 2

Environmental Protection Agency National Emission Standards for Hazardous Air Pollutants for Source Categories (Rule 6-2)

#### 9VAC5-60-90. General.

The Environmental Protection Agency (EPA) National Emission Standards for Hazardous Air Pollutants for Source Categories (Maximum Achievable Control Technologies, or MACTs) as promulgated in 40 CFR Part 63 and designated in 9VAC5-60-100 are, unless indicated otherwise, incorporated by reference into the regulations of the board as amended by the word or phrase substitutions given in 9VAC5-60-110. The complete text of the subparts in 9VAC5-60-100 incorporated in this regulation by reference is contained in 40 CFR Part 63. The 40 CFR section numbers appearing under each subpart in 9VAC5-60-100 identify the specific provisions of the subpart incorporated by reference. The specific version of the provision adopted by reference shall be that contained in the CFR (2018) (2019) in effect July 1, 2018 2019. In making reference to the Code of Federal Regulations, 40 CFR Part 63 means Part 63 of Title 40 of the Code of Federal Regulations; 40 CFR 63.1 means 63.1 in Part 63 of Title 40 of the Code of Federal Regulations.

VA.R. Doc. No. R20-6190; Filed January 6, 2020, 2:58 p.m.

#### **Final Regulation**

REGISTRAR'S NOTICE: The following regulatory action is exempt from Article 2 of the Administrative Process Act in accordance with § 2.2-4006 A 4 c of the Code of Virginia, which excludes regulations that are necessary to meet the requirements of federal law or regulation provided such regulations do not differ materially from those required by federal law or regulation. The State Air Pollution Control Board is also claiming an exemption from the Administrative Process Act in accordance with § 2.2-4006 A 3 of the Code of Virginia, which excludes regulations that consist only of changes in style or form or corrections of technical errors. The State Air Pollution Control Board will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

<u>Title of Regulation:</u> 9VAC5-80. Permits for Stationary Sources (Rev. B19) (amending 9VAC5-80-2010, 9VAC5-80-2120).

<u>Statutory Authority:</u> § 10.1-1308 of the Code of Virginia; §§ 110, 112, 165, 173, 182, and Title V of the Clean Air Act; 40 CFR Parts 51, 61, 63, 63, 70, and 72.

Effective Date: March 4, 2020.

Agency Contact: Karen G. Sabasteanski, Department of Environmental Quality, 1111 East Main Street, Suite 1400, P.O. Box 1105, Richmond, VA 23218, telephone (804) 698-4426, FAX (804) 698-4510, or email karen.sabasteanski@deq.virginia.gov.

Background: On December 6, 2018 (83 FR 62998), the U.S. Environmental Protection Agency (EPA) finalized nonattainment area and ozone transport region (OTR) implementation requirements for the 2015 ozone National Ambient Air Quality Standards (NAAQS) that were promulgated on October 1, 2015. This rule included amendments to new source review (NSR) permitting requirements for ozone nonattainment areas found in 40 CFR 51.165 that enable a permitting agency to allow offset requirements for emissions of nitrogen oxides (NO<sub>X</sub>) and volatile organic compounds (VOC) to be met by offsetting reductions in actual emissions of either of those precursors as established by a case-specific permit ratio for ozone. Virginia administers the nonattainment NSR program through Article 9 (9VAC5-80-2000 et seq.) of 9VAC5-80 (Permits for Stationary Sources), which must be the same as or equivalent to the revised federal program, so must be amended accordingly.

Additionally, default program requirements to address VOC as a  $PM_{2.5}$  precursor as published in EPA's August 24, 2016 (81 FR 58010) final implementation rule for the 2012 NAAQS for very fine particulate matter ( $PM_{2.5}$ ) are not appropriate for and do not benefit Virginia's NSR program. EPA has clarified, and the department agrees, that an emissions rate for VOC as a  $PM_{2.5}$  precursor is not as protective, transparent, quantifiable, or reliable as the original emissions rate for  $NO_X$ , particularly given the predominance of  $NO_X$  compared to VOC in the nonattainment area. The amendment to the definition of "significant," also being made at this time, replaces those EPA provisions with the original text, which will better enable the department to ensure that  $PM_{2.5}$  emissions are properly controlled in the context of federal mandates.

#### Summary:

The amendments (i) allow offset requirements for emissions of  $NO_X$  and VOC to be met by offsetting reductions in actual emissions of either of those precursors as established by a case-specific permit ratio for ozone to meet the requirements of 40 CFR 51.165(a)(11) and (ii) correct the definition of "significant" to properly identify how to address VOC as a  $PM_{2.5}$  precursor.

#### 9VAC5-80-2010. Definitions.

- A. As used in this article, all words or terms not defined here shall have the meanings given them in 9VAC5-10 (General Definitions), unless otherwise required by context.
- B. For the purpose of this article, 9VAC5-50-270, and any related use, the words or terms shall have the meanings given them in subsection C of this section.
- C. Terms defined.
- "Actual emissions" means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as

determined in accordance with subdivisions a, b, and c of this definition, except that this definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL under 9VAC5-80-2144. Instead, the definitions of "projected actual emissions" and "baseline actual emissions" shall apply for those purposes.

- a. In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period which that precedes the particular date and which that is representative of normal source operation. The board will allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.
- b. The board may presume that the source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
- c. For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.
- "Actuals PAL for a major stationary source" means a PAL based on the baseline actual emissions of all emissions units at the source that emit or have the potential to emit the PAL pollutant.
- "Administrator" means the administrator of the U.S. Environmental Protection Agency (EPA) or an authorized representative.
- "Allowable emissions" means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally and state enforceable limits which that restrict the operating rate, hours of operation, or both) and the most stringent of the following:
  - a. The applicable standards set forth in 40 CFR Parts 60, 61, and 63;
  - b. Any applicable implementation plan emissions limitation including those with a future compliance date; or
  - c. The emissions limit specified as a federally and state enforceable permit condition, including those with a future compliance date.

For the purposes of actuals PALs, "allowable emissions" shall also be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.

"Applicable federal requirement" means all of, but not limited to, the following as they apply to emissions units in a source subject to this article (including requirements that have been promulgated or approved by the administrator through rulemaking at the time of permit issuance but have futureeffective compliance dates):

- a. Any standard or other requirement provided for in an implementation plan established pursuant to § 110 or 111(d) of the federal Clean Air Act, including any source-specific provisions such as consent agreements or orders.
- b. Any limit or condition in any construction permit issued under the new source review program or in any operating permit issued pursuant to the state operating permit program.
- c. Any emission standard, alternative emission standard, alternative emission limitation, equivalent emission limitation, or other requirement established pursuant to § 112 or 129 of the federal Clean Air Act as amended in 1990.
- d. Any new source performance standard or other requirement established pursuant to § 111 of the federal Clean Air Act, and any emission standard or other requirement established pursuant to § 112 of the federal Clean Air Act before it was amended in 1990.
- e. Any limitations and conditions or other requirement in a Virginia regulation or program that has been approved by EPA under subpart E of 40 CFR Part 63 for the purposes of implementing and enforcing § 112 of the federal Clean Air Act.
- f. Any requirement concerning accident prevention under  $\S 112(r)(7)$  of the federal Clean Air Act.
- g. Any compliance monitoring requirements established pursuant to either § 504(b) or 114(a)(3) of the federal Clean Air Act.
- h. Any standard or other requirement for consumer and commercial products under § 183(e) of the federal Clean Air Act.
- i. Any standard or other requirement for tank vessels under § 183(f) of the federal Clean Air Act.
- j. Any standard or other requirement in 40 CFR Part 55 to control air pollution from outer continental shelf sources.
- k. Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the federal Clean Air Act, unless the administrator has determined that such requirements need not be contained in a permit issued under this article.
- 1. With regard to temporary sources subject to 9VAC5-80-130, (i) any ambient air quality standard, except applicable state requirements, and (ii) requirements regarding increments or visibility as provided in Article 8 (9VAC5-80-1605 et seq.) of this part.

"Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with the following:

- a. For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner within the five-year period immediately preceding when the owner begins actual construction of the project. The board may allow the use of a different time period upon a determination that it is more representative of normal source operation.
  - (1) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.
  - (2) The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.
  - (3) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period may be used for each regulated NSR pollutant.
  - (4) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by subdivision a (2) of this definition.
- b. For an existing emissions unit other than an electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner within the 10-year period immediately preceding either the date the owner begins actual construction of the project, or the date a complete permit application is received by the board for a permit required either under this section or under a plan approved by the administrator, whichever is earlier, except that the 10-year period shall not include any period earlier than November 15, 1990. The board will allow the use of a different time period upon a determination that it is more representative of normal source operation.
  - (1) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.
  - (2) The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above any emission limitation

that was legally enforceable during the consecutive 24-month period.

- (3) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the source shall currently comply, had such source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the administrator proposed or promulgated under 40 CFR Part 63, the baseline actual emissions need only be adjusted if the state has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of 9VAC5-80-2120 K.
- (4) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period may be used for each regulated NSR pollutant.
- (5) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by subdivisions b (2) and b (3) of this definition.
- c. For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.
- d. For a PAL for a major stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in subdivision a of this definition, for other existing emissions units in accordance with the procedures contained in subdivision b of this definition, and for a new emissions unit in accordance with the procedures contained in subdivision c of this definition.

"Begin actual construction" means, in general, initiation of physical on site onsite construction activities on an emissions unit that are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operation, this term refers to those onsite onsite activities other than preparatory activities which mark the initiation of the change.

"Best available control technology" or "BACT" means an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each regulated

NSR pollutant that would be emitted from any proposed major stationary source or major modification that the board, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant that would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60, 61, and 63. If the board determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice, or operation, and shall provide for compliance by means that achieve equivalent results.

"Building, structure, facility, or installation" means all of the pollutant-emitting activities that belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "major group" (i.e., which have the same two-digit code) as described in the "Standard Industrial Classification Manual," as amended by the supplement (see 9VAC5-20-21).

"Clean coal technology" means any technology, including technologies applied at the precombustion, combustion, or post-combustion stage, at a new or existing facility that will achieve significant reductions in air emissions of sulfur dioxide or nitrogen oxides associated with the utilization of coal in the generation of electricity, or process steam that was not in widespread use as of November 15, 1990.

"Clean coal technology demonstration project" means a project using funds appropriated under the heading "Department of Energy-Clean Coal Technology," up to a total amount of \$2.5 billion for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the U.S. EPA. The federal contribution for a qualifying project shall be at least 20% of the total cost of the demonstration project.

"Commence," as applied to construction of a major stationary source or major modification, means that the owner has all necessary preconstruction approvals or permits and either has:

- a. Begun, or caused to begin, a continuous program of actual on site onsite construction of the source, to be completed within a reasonable time; or
- b. Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner, to undertake a program of actual construction of the source, to be completed within a reasonable time.

"Complete application" means that the application contains all the information necessary for processing the application and the provisions of § 10.1-1321.1 of the Virginia Air Pollution Control Law have been met. Designating an application complete for purposes of permit processing does not preclude the board from requesting or accepting additional information.

"Construction" means any physical change in or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in actual emissions.

"Continuous emissions monitoring system" or "CEMS" means all of the equipment that may be required to meet the data acquisition and availability requirements of this article, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.

"Continuous emissions rate monitoring system" or "CERMS" means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).

"Continuous parameter monitoring system" or "CPMS" means all of the equipment necessary to meet the data acquisition and availability requirements of this article, to monitor process and control device operational parameters (for example (e.g., control device secondary voltages and electric currents) and other information (for example (e.g., gas flow rate, O<sub>2</sub> or CO<sub>2</sub> concentrations), and to record average operational parameter values on a continuous basis.

"Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 megawatt electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

"Emissions cap" means any limitation on the rate of emissions of any air pollutant from one or more emissions units established and identified as an emissions cap in any permit issued pursuant to the new source review program or operating permit program. "Emissions unit" means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant and includes an electric steam generating unit. For purposes of this article, there are two types of emissions units: (i) a new emissions unit is any emissions unit that is (or will be) newly constructed and that has existed for less than two years from the date such emissions unit first operated; and (ii) an existing emissions unit is any emissions unit that is not a new emissions unit. A replacement unit is an existing emissions unit.

"Enforceable as a practical matter" means that the permit contains emission limitations that are enforceable by the board or the department and meet the following criteria:

- a. Are permanent;
- b. Contain a legal obligation for the owner to adhere to the terms and conditions:
- c. Do not allow a relaxation of a requirement of the implementation plan;
- d. Are technically accurate and quantifiable;
- e. Include averaging times or other provisions that allow at least monthly (or a shorter period if necessary to be consistent with the implementation plan) checks on compliance. This may include, but not be limited to, the following: compliance with annual limits in a rolling basis, monthly or shorter limits, and other provisions consistent with this article and other regulations of the board; and
- f. Require a level of recordkeeping, reporting and monitoring sufficient to demonstrate compliance.

"Federal land manager" means, with respect to any lands in the United States, the secretary of the department with authority over such lands.

"Federally enforceable" means all limitations and conditions that are enforceable by the administrator and citizens under the federal Clean Air Act or that are enforceable under other statutes administered by the administrator. Federally enforceable limitations and conditions include, but are not limited to the following:

- a. Emission standards, alternative emission standards, alternative emission limitations, and equivalent emission limitations established pursuant to § 112 of the federal Clean Air Act as amended in 1990.
- b. New source performance standards established pursuant to § 111 of the federal Clean Air Act, and emission standards established pursuant to § 112 of the federal Clean Air Act before it was amended in 1990.
- c. All terms and conditions (unless expressly designated as not federally enforceable) in a federal operating permit, including any provisions that limit a source's potential to emit.

- d. Limitations and conditions that are part of an implementation plan established pursuant to § 110, 111(d), or 129 of the federal Clean Air Act.
- e. Limitations and conditions (unless expressly designated as not federally enforceable) that are part of a federal construction permit issued under 40 CFR 52.21 or any construction permit issued under regulations approved by EPA into the implementation plan.
- f. Limitations and conditions (unless expressly designated as not federally enforceable) that are part of a state operating permit where the permit and the permit program pursuant to which it was issued meet all of the following criteria:
  - (1) The operating permit program has been approved by the EPA into the implementation plan under § 110 of the federal Clean Air Act.
  - (2) The operating permit program imposes a legal obligation that operating permit holders adhere to the terms and limitations of such permits and provides that permits that do not conform to the operating permit program requirements and the requirements of EPA's underlying regulations may be deemed not "federally enforceable" by EPA.
  - (3) The operating permit program requires that all emission limitations, controls, and other requirements imposed by such permits will be at least as stringent as any other applicable limitations and requirements contained in the implementation plan or enforceable under the implementation plan, and that the program may not issue permits that waive, or make less stringent, any limitations or requirements contained in or issued pursuant to the implementation plan, or that are otherwise "federally enforceable."
  - (4) The limitations, controls, and requirements in the permit in question are permanent, quantifiable, and otherwise enforceable as a practical matter.
  - (5) The permit in question was issued only after adequate and timely notice and opportunity for comment by the EPA and the public.
- g. Limitations and conditions in a regulation of the board or program that has been approved by EPA under subpart E of 40 CFR Part 63 for the purposes of implementing and enforcing § 112 of the federal Clean Air Act.
- h. Individual consent agreements that EPA has legal authority to create.

"Federal operating permit" means a permit issued under the federal operating permit program.

"Federal operating permit program" means an operating permit system (i) for issuing terms and conditions for major stationary sources, (ii) established to implement the requirements of Title V of the federal Clean Air Act and associated regulations, and (iii) codified in Article 1 (9VAC5-80-50 et seq.), Article 2 (9VAC5-80-310 et seq.), Article 3 (9VAC5-80-360 et seq.), and Article 4 (9VAC5-80-710 et seq.) of this part.

"Fugitive emissions" means those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

"Lowest achievable emissions rate" or "LAER" means for any source, the more stringent rate of emissions based on the following:

- a. The most stringent emissions limitation that is contained in the implementation plan of any state for such class or category of stationary source, unless the owner of the proposed stationary source demonstrates that such limitations are not achievable; or
- b. The most stringent emissions limitation that is achieved in practice by such class or category of stationary sources. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of this term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance.

"Major emissions unit" means (i) any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL pollutant in an attainment area; or (ii) any emissions unit that emits or has the potential to emit the PAL pollutant in an amount that is equal to or greater than the major source threshold for the PAL pollutant for nonattainment areas in subdivision a (1) of the definition of "major stationary source."

"Major modification"

- a. Means any physical change in or change in the method of operation of a major stationary source that would result in (i) a significant emissions increase of a regulated NSR pollutant; and (ii) a significant net emissions increase of that pollutant from the source.
- b. Any significant emissions increase from any emissions units or net emissions increase at a source that is considered significant for volatile organic compounds shall be considered significant for ozone.
- c. A physical change in or change in the method of operation shall not include the following:
  - (1) Routine maintenance, repair, and replacement.
- (2) Use of an alternative fuel or raw material by reason of an order under § 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any

- superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act.
- (3) Use of an alternative fuel by reason of an order or rule § 125 of the federal Clean Air Act.
- (4) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste.
- (5) Use of an alternative fuel or raw material by a stationary source that:
- (a) The source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any federally and state enforceable permit condition which was established after December 21, 1976, pursuant to 40 CFR 52.21 or this chapter; or
- (b) The source is approved to use under any permit issued under 40 CFR 52.21 or this chapter.
- (6) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally and state enforceable permit condition which that was established after December 21, 1976, pursuant to 40 CFR 52.21 or this chapter.
- (7) Any change in ownership at a stationary source.
- (8) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:
- (a) The applicable implementation plan; and
- (b) Other requirements necessary to attain and maintain the national ambient air quality standard during the project and after it is terminated.
- d. This definition shall not apply with respect to a particular regulated NSR pollutant when the source is complying with the requirements under 9VAC5-80-2144 for a PAL for that pollutant. Instead, the definition for "PAL major modification" shall apply.

"Major new source review (NSR) permit" means a permit issued under the major new source review program.

"Major new source review (major NSR) program" means a preconstruction review and permit program (i) for new major stationary sources or major modifications (physical changes or changes in the method of operation), (ii) established to implement the requirements of §§ 112, 165, and 173 of the federal Clean Air Act and associated regulations, and (iii) codified in Article 7 (9VAC5-80-1400 et seq.), Article 8 (9VAC5-80-1605 et seq.), and Article 9 (9VAC5-80-2000 et seq.) of this part.

"Major stationary source"

a. Means:

- (1) Any stationary source of air pollutants that emits, or has the potential to emit, (i) 100 tons per year or more of a regulated NSR pollutant, (ii) 50 tons per year or more of volatile organic compounds or nitrogen oxides in ozone nonattainment areas classified as serious in 9VAC5-20-204, (iii) 25 tons per year or more of volatile organic compounds or nitrogen oxides in ozone nonattainment areas classified as severe in 9VAC5-20-204, or (iv) 100 tons per year or more of nitrogen oxides or 50 tons per year of volatile organic compounds in the Ozone Transport Region; or
- (2) Any physical change that would occur at a stationary source not qualifying under subdivision a (1) of this definition as a major stationary source if the change would constitute a major stationary source by itself.
- b. A major stationary source that is major for volatile organic compounds shall be considered major for ozone.
- c. The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this article whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:
  - (1) Coal cleaning plants (with thermal dryers).
  - (2) Kraft pulp mills.
  - (3) Portland cement plants.
  - (4) Primary zinc smelters.
  - (5) Iron and steel mills.
  - (6) Primary aluminum ore reduction plants.
  - (7) Primary copper smelters.
  - (8) Municipal incinerators (or combinations of them) capable of charging more than 250 tons of refuse per day.
  - (9) Hydrofluoric acid plants.
  - (10) Sulfuric acid plants.
  - (11) Nitric acid plants.
  - (12) Petroleum refineries.
  - (13) Lime plants.
  - (14) Phosphate rock processing plants.
  - (15) Coke oven batteries.
  - (16) Sulfur recovery plants.
  - (17) Carbon black plants (furnace process).
  - (18) Primary lead smelters.
  - (19) Fuel conversion plants.
  - (20) Sintering plants.

- (21) Secondary metal production plants.
- (22) Chemical process plants (which shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140).
- (23) Fossil-fuel boilers (or combination of them) totaling more than 250 million British thermal units per hour heat input.
- (24) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.
- (25) Taconite ore processing plants.
- (26) Glass fiber manufacturing plants.
- (27) Charcoal production plants.
- (28) Fossil fuel steam electric plants of more than 250 million British thermal units per hour heat input.
- (29) Any other stationary source category, which, as of August 7, 1980, is being regulated under 40 CFR Part 60, 61, or 63.

"Minor new source review (NSR) permit" means a permit issued under the minor new source review program.

"Minor new source review (minor NSR) program" means a preconstruction review and permit program (i) for new stationary sources or modifications (physical changes or changes in the method of operation) that are not subject to review under the major new source review program, (ii) established to implement the requirements of §§ 110(a)(2)(C) and 112 of the federal Clean Air Act and associated regulations, and (iii) codified in Article 6 (9VAC5-80-1100 et seq.) of this part.

"Necessary preconstruction approvals or permits" means those permits required under the NSR program that are part of the applicable implementation plan.

"Net emissions increase" means:

- a. With respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:
  - (1) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to 9VAC5-80-2000 H; and
  - (2) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this subdivision shall be determined as provided in the definition of "baseline actual emissions," except that subdivisions a (3) and b (4) of that definition shall not apply.

- b. An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs before the date that the increase from the particular change occurs. For sources located in ozone nonattainment areas classified as serious or severe in 9VAC5-20-204, an increase or decrease in actual emissions of volatile organic compounds or nitrogen oxides is contemporaneous with the increase from the particular change only if it occurs during a period of five consecutive calendar years which includes the calendar year in which the increase from the particular change occurs.
- c. An increase or decrease in actual emissions is creditable only if:
  - (1) It occurs between the date five years before construction on the particular change commences and the date that the increase from the particular change occurs; and
  - (2) The board has not relied on it in issuing a permit for the source pursuant to this article which permit is in effect when the increase in actual emissions from the particular change occurs.
- d. An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
- e. A decrease in actual emissions is creditable only to the extent that:
  - (1) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;
  - (2) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins;
  - (3) The board has not relied on it in issuing any permit pursuant to this chapter or the board has not relied on it in demonstrating attainment or reasonable further progress in the implementation plan; and
- (4) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
- f. An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.
- g. Subdivision a of the definition of "actual emissions" shall not apply for determining creditable increases and decreases or after a change.

"New source performance standard" or "NSPS" means the U.S. Environmental Protection Agency Regulations on Standards of Performance for New Stationary Sources, as promulgated in 40 CFR Part 60 and designated in 9VAC5-50-410.

"New source review (NSR) permit" means a permit issued under the new source review program.

"New source review (NSR) program" means a preconstruction review and permit program (i) for new stationary sources or modifications (physical changes or changes in the method of operation); (ii) established to implement the requirements of §§ 110(a)(2)(C), 112 (relating to permits for hazardous air pollutants), 165 (relating to permits in prevention of significant deterioration areas), and 173 (relating to permits in nonattainment areas) of the federal Clean Air Act and associated regulations; and (iii) codified in Article 6 (9VAC5-80-1100 et seq.), Article 7 (9VAC5-80-1400 et seq.), Article 8 (9VAC5-80-1605 et seq.), and Article 9 (9VAC5-80-2000 et seq.) of this part.

"Nonattainment major new source review (NSR) program" means a preconstruction review and permit program (i) for new major stationary sources or major modifications (physical changes or changes in the method of operation), (ii) established to implement the requirements of § 173 of the federal Clean Air Act and associated regulations, and (iii) codified in Article 9 (9VAC5-80-2000 et seq.) of this part. Any permit issued under such a program is a major NSR permit.

"Nonattainment pollutant" means, within a nonattainment area, the pollutant for which such area is designated nonattainment. For ozone nonattainment areas, the nonattainment pollutants shall be volatile organic compounds (including hydrocarbons) and nitrogen oxides.

"Ozone transport region" means the area established by § 184(a) of the federal Clean Air Act or any other area established by the administrator pursuant to § 176A of the federal Clean Air Act for purposes of ozone. For the purposes of this article, the Ozone Transport Region consists of the following localities: Arlington County, Fairfax County, Loudoun County, Prince William County, Stafford County, Alexandria City, Fairfax City, Falls Church City, Manassas City, and Manassas Park City.

"Plantwide applicability limitation" or "PAL" means an emission limitation expressed in tons per year, for a pollutant at a major stationary source, that is enforceable as a practical matter and established sourcewide in accordance with 9VAC5-80-2144.

"PAL effective date" generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant. "PAL effective period" means the period beginning with the PAL effective date and ending 10 years later.

"PAL major modification" means, notwithstanding the definitions for "major modification" and "net emissions increase," any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

"PAL permit" means the state operating permit issued by the board that establishes a PAL for a major stationary source.

"PAL pollutant" means the pollutant for which a PAL is established at a major stationary source.

"Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment, and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is federally and state enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source. For the purposes of actuals PALs, any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment, and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is federally enforceable or enforceable as a practical matter by the state.

"Predictive emissions monitoring system" or "PEMS" means all of the equipment necessary to monitor process and control device operational parameters (for example (e.g., control device secondary voltages and electric currents) and other information (for example (e.g., gas flow rate, O<sub>2</sub> or CO<sub>2</sub> concentrations), and calculate and record the mass emissions rate (for example (e.g., pounds per hour) on a continuous basis.

"Prevention of significant deterioration (PSD) program" means a preconstruction review and permit program (i) for new major stationary sources or major modifications (physical changes or changes in the method of operation), (ii) established to implement the requirements of § 165 of the federal Clean Air Act and associated regulations, and (iii) codified in Article 8 (9VAC5-80-1605 et seq.) of this part.

"Project" means a physical change in or change in the method of operation of an existing major stationary source.

"Projected actual emissions" means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the five years (12-month period) following the date the unit resumes regular operation after the project, or in any one of

the 10 years following that date, if the project involves increasing the emissions unit's design capacity or its potential to emit of that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the source. In determining the projected actual emissions before beginning actual construction, the owner shall:

- a. Consider all relevant information, including but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the state or federal regulatory authorities, and compliance plans under the approved plan;
- b. Include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions; and
- c. Exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have emitted during the consecutive 24-month period used to establish the baseline actual emissions and that are also unrelated to the particular project, including any increased utilization due to product demand growth, provided such exclusion shall not reduce any calculated increases in emissions that are caused by, result from, or are related to the particular project; or
- d. In lieu of using the method set out in subdivisions a, b, and c of this definition, may elect to use the emissions unit's potential to emit, in tons per year, as defined under the definition of "potential to emit."

"Public comment period" means a time during which the public shall have the opportunity to comment on the new or modified source permit application information (exclusive of confidential information), the preliminary review and analysis of the effect of the source upon the ambient air quality, and the preliminary decision of the board regarding the permit application.

"Reasonable further progress" means the annual incremental reductions in emissions of a given air pollutant (including substantial reductions in the early years following approval or promulgation of an implementation plan and regular reductions thereafter) which that are sufficient in the judgment of the board to provide for attainment of the applicable ambient air quality standard within a specified nonattainment area by the attainment date prescribed in the implementation plan for such area.

"Reasonably available control technology" or "RACT" means the lowest emission limit that a particular source is capable of meeting by the application of control technology that is reasonably available, considering technological and economic feasibility.

"Regulated NSR pollutant" means any of the following:

- a. Nitrogen oxides or any volatile organic compound.
- b. Any pollutant for which an ambient air quality standard has been promulgated.
- c. Any pollutant that is identified under this subdivision as a constituent or precursor of a general pollutant listed under subdivision a or b of this definition, provided that such constituent or precursor pollutant may only be regulated under this article as part of regulation of the general pollutant. Precursors identified for purposes of this article shall be the following:
- (1) Volatile organic compounds and nitrogen oxides are precursors to ozone in all ozone nonattainment areas.
- (2) Sulfur dioxide, nitrogen oxides, volatile organic compounds, and ammonia are precursors to  $PM_{2.5}$  in any  $PM_{2.5}$  nonattainment area.
- (3) Nitrogen oxides are presumed to be precursors to PM<sub>2.5</sub> in all PM<sub>2.5</sub> nonattainment areas, unless the board determines that emissions of nitrogen oxides from sources in a specific area are not a significant contributor to that area's ambient PM<sub>2.5</sub> concentrations.
- (4) Volatile organic compounds and ammonia are presumed not to be precursors to  $PM_{2.5}$  in any  $PM_{2.5}$  nonattainment area, unless the board determines that emissions of volatile organic compounds or ammonia from sources in a specific area are a significant contributor to that area's ambient  $PM_{2.5}$  concentrations.
- d.  $PM_{2.5}$  emissions and  $PM_{10}$  emissions shall include gaseous emissions from a source or activity that condense to form particulate matter at ambient temperatures. On or after January 1, 2011, such condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for  $PM_{2.5}$  and  $PM_{10}$  in permits issued under this article. Compliance with emissions limitations for  $PM_{2.5}$  and  $PM_{10}$  issued prior to this date shall not be based on condensable particulate matter unless required by the terms and conditions of the permit. Applicability determinations made prior to this date without accounting for condensable particulate matter shall not be considered in violation of this article.

"Replacement unit" means an emissions unit for which all the following criteria are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced.

- a. The emissions unit is a reconstructed unit within the meaning of 40 CFR 60.15(b)(1), or the emissions unit completely takes the place of an existing emissions unit.
- b. The emissions unit is identical to or functionally equivalent to the replaced emissions unit.

- c. The replacement does not alter the basic design parameters of the process unit.
- d. The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.

"Secondary emissions" means emissions that would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purpose of this article, secondary emissions shall be specific, well defined, quantifiable, and affect the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any off-site support facility which that would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions that come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

"Significant" means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

a. Ozone nonattainment areas classified as serious or severe in 9VAC5-20-204.

POLLUTANT	EMISSIONS RATE
Carbon Monoxide	100 tons per year (tpy)
Nitrogen Oxides	25 tpy
Sulfur Dioxide	40 tpy
PM <sub>10</sub>	15 tpy
PM <sub>2.5</sub>	10 tpy of direct PM <sub>2.5</sub> emissions; 40 tpy of sulfur dioxide emissions; 40 tpy of nitrogen oxide emissions or 40 tpy of volatile organic compound emissions, to the extent that any such pollutant is defined as a precursor for PM <sub>2.5</sub> in unless demonstrated not to be a PM <sub>2.5</sub> precursor under the definition of "regulated NSR pollutant"

Ozone	25 tpy of volatile organic compounds
Lead	0.6 tpy

#### b. Other nonattainment areas.

POLLUTANT	EMISSIONS RATE
Carbon Monoxide	100 tons per year (tpy)
Nitrogen Oxides	40 tpy
Sulfur Dioxide	40 tpy
PM <sub>10</sub>	15 tpy
PM <sub>2.5</sub>	10 tpy of direct PM <sub>2.5</sub> emissions; 40 tpy of sulfur dioxide emissions; 40 tpy of nitrogen oxide emissions or 40 tpy of volatile organic compound emissions, to the extent that any such pollutant is defined as a precursor for PM <sub>2.5</sub> in unless demonstrated not to be a PM <sub>2.5</sub> precursor under the definition of "regulated NSR pollutant"
Ozone	40 tpy of volatile organic compounds
Lead	0.6 tpy

"Significant emissions increase" means, for a regulated NSR pollutant, an increase in emissions that is significant for that pollutant.

"Significant emissions unit" means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit.

"Small emissions unit" means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant.

"State enforceable" means all limitations and conditions that are enforceable as a practical matter, including any regulation of the board, those requirements developed pursuant to 9VAC5-170-160, requirements within any applicable order or variance, and any permit requirements established pursuant to this chapter.

"State operating permit" means a permit issued under the state operating permit program.

"State operating permit program" means an operating permit program (i) for issuing limitations and conditions for stationary sources, (ii) promulgated to meet the EPA's minimum criteria for federal enforceability, including adequate notice and opportunity for the EPA and public comment prior to issuance of the final permit, and practicable enforceability, and (iii) codified in Article 5 (9VAC5-80-800 et seq.) of this part.

"Stationary source" means any building, structure, facility, or installation that emits or may emit a regulated NSR pollutant.

"Synthetic minor" means a stationary source whose potential to emit is constrained by state-enforceable and federally enforceable limits, so as to place that stationary source below the threshold at which it would be subject to permit or other requirements governing major stationary sources in regulations of the board or in the federal Clean Air Act.

"Temporary clean coal technology demonstration project" means a clean coal technology demonstration project that is operated for a period of five years or less, and that complies with the applicable implementation plan and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

#### 9VAC5-80-2120. Offsets.

A. Owners shall comply with the offset requirements of this article by obtaining emission reductions from the same source or other sources in the same nonattainment area, except that for ozone precursor pollutants the board may allow the owner to obtain such emission reductions in another nonattainment area if (i) the other area has an equal or higher nonattainment classification than the area in which the source is located and (ii) emissions from such other area contribute to a violation of the ambient air quality standard in the nonattainment area in which the source is located. By the time a new or modified source begins operation, such emission reductions shall (i) be in effect, (ii) be state and federally enforceable and (iii) assure that the total tonnage of increased emissions of the air pollutant from the new or modified source shall be offset by an equal or greater reduction, as applicable, in the actual emissions of such air pollutant from the same or other sources in the nonattainment area.

- B. The (i) ratio of total emission reductions of volatile organic compounds to total increased emissions of volatile organic compounds or (ii) the ratio of total emission reductions of nitrogen oxides to total increased emissions of nitrogen oxides in ozone nonattainment areas designated in 9VAC5-20-204 shall be at least the following:
  - 1. Nonattainment areas classified as marginal 1.1 to one.
  - 2. Nonattainment areas classified as moderate 1.15 to one.

- 3. Nonattainment areas classified as serious 1.2 to one.
- 4. Nonattainment areas classified as severe 1.3 to one.
- 5. Nonattainment areas with any other classification or no classification 1 to one.

The ratio of total actual emissions reductions of the nonattainment pollutant to the emissions increase shall be at least 1 to one unless an alternative ratio is provided above for the applicable nonattainment area designated in 9VAC5-20-204.

- C. Emission reductions otherwise required by these regulations shall not be creditable as emissions reductions for purposes of any such offset requirement. Incidental emission reductions which are not otherwise required by these regulations shall be creditable as emission reductions for such purposes if such emission reductions meet the requirements of subsection A of this section.
- D. The board will allow an owner to offset by alternative or innovative means emission increases from rocket engine and motor firing, and cleaning related to such firing, at an existing or modified major source that tests rocket engines or motors under the following conditions:
  - 1. Any modification proposed is solely for the purpose of expanding the testing of rocket engines or motors at an existing source that is permitted to test such engines on November 15, 1990.
  - 2. The source demonstrates to the satisfaction of the board that it has used all reasonable means to obtain and utilize offsets, as determined on an annual basis, for the emissions increases beyond allowable levels, that all available offsets are being used, and that sufficient offsets are not available to the source.
  - 3. The source has obtained a written finding from the U.S. Department of Defense, U.S. Department of Transportation, National Aeronautics and Space Administration, or other appropriate federal agency, that the testing of rocket motors or engines at the facility is required for a program essential to the national security.
  - 4. The owner will comply with an alternative measure, imposed by the board, designed to offset any emission increases beyond permitted levels not directly offset by the source. In lieu of imposing any alternative offset measures, the board may impose an emissions fee to be paid to the board which shall be an amount no greater than 1.5 times the average cost of stationary source control measures adopted in that nonattainment area during the previous three years. The board will utilize the fees in a manner that maximizes the emissions reductions in that nonattainment area.
- E. For sources subject to the provisions of this article, the baseline for determining credit for emissions reduction is the

emissions limit under the applicable implementation plan in effect at the time the application to construct is filed, except that the offset baseline shall be the actual emissions of the source from which offset credit is obtained where:

- 1. The demonstration of reasonable further progress and attainment of ambient air quality standards is based upon the actual emissions of sources located within a designated nonattainment area; or
- 2. The applicable implementation plan does not contain an emissions limitation for that source or source category.
- F. Where the emissions limit under the applicable implementation plan allows greater emissions than the potential to emit of the source, emissions offset credit will be allowed only for control below this potential.
- G. For an existing fuel combustion source, credit shall be based on the allowable emissions under the applicable implementation plan for the type of fuel being burned at the time the application to construct is filed. If the owner of the existing source commits to switch to a cleaner fuel at some future date, emissions offset credit based on the allowable (or actual) emissions for the fuels involved is not acceptable, unless the permit is conditioned to require the use of a specified alternative control measure which would achieve the same degree of emissions reduction should the source switch back to a dirtier fuel at some later date. The board will ensure that adequate long-term supplies of the new fuel are available before granting emissions offset credit for fuel switches.
- H. Emissions reductions achieved by shutting down an existing source or curtailing production or operating hours below baseline levels may be generally credited if such reductions are permanent, quantifiable, and federally and state enforceable. In addition, the shutdown or curtailment is creditable only if it occurred on or after January 1, 1991.
- I. No emissions credit may be allowed for replacing one volatile organic compound with another of lesser reactivity.
- J. Where this article does not adequately address a particular issue, the provisions of Appendix S to 40 CFR Part 51 shall be followed to the extent that they do not conflict with this section. The provisions of Appendix S to 40 CFR Parts 51 apply only to the extent that they are incorporated by reference in 9VAC5-20-21.
- K. Credit for an emissions reduction can be claimed to the extent that the board has not relied on it in issuing any permit under this chapter or has not relied on it in demonstrating attainment or reasonable further progress.
- L. The total tonnage of increased emissions, in tons per year, resulting from a major modification that shall be offset in accordance with § 173 of the federal Clean Air Act shall be determined by summing the difference between the allowable

emissions after the modification and the actual emissions before the modification for each emissions unit.

- M. In meeting the emissions offset requirements of this section, the emissions offsets obtained shall be for the same regulated NSR pollutant unless interprecursor offsetting is permitted for a particular pollutant as specified in this subsection.
  - 1. The offset requirements in this section for direct PM<sub>2.5</sub> emissions or emissions of precursors of PM<sub>2.5</sub> may be satisfied by offsetting reductions in direct PM<sub>2.5</sub> emissions or emissions of any PM<sub>2.5</sub> precursor identified under subdivision c of the definition of "regulated NSR pollutant" if such offsets comply with the interprecursor trading hierarchy and ratio established in accordance with subsections N through P of this section for a particular nonattainment area. The board may allow the offset requirement of this section for direct PM<sub>2.5</sub> emissions or precursors of PM<sub>2.5</sub> to be satisfied by offsetting reductions in direct PM<sub>2.5</sub> emissions or emissions of any PM<sub>2.5</sub> precursor using a ratio approved by the board for the nonattainment area after public review and comment as provided in subsections N and O of this section.
  - 2. The offset requirements of this section for emissions of the ozone precursors  $NO_X$  and VOC may be satisfied, where appropriate, by offsetting reductions in actual emissions of either of those precursors if the requirements for such offsets under subdivision 3 of this subsection and all other requirements for such offsets are also satisfied.
  - 3. For any case-specific permit ratio for ozone proposed by a permit applicant to be used for a particular permit, the following information shall be submitted to the board to support approval of the ratio:
  - a. The description of the air quality model used to propose a case-specific ratio;
  - b. The proposed ratio for the precursor substitution and accompanying calculations; and
  - c. A modeling demonstration showing that such ratios as applied to the proposed project and credit source will provide an equivalent or greater air quality benefit with respect to ground level concentrations in the ozone nonattainment area than an offset of the emitted precursor would achieve.
- N. The board may allow the offset requirement in subsection M of this section for direct PM<sub>2.5</sub>-emissions or precursors of PM<sub>2.5</sub>-to be satisfied by offsetting reductions in direct PM<sub>2.5</sub> emissions or emissions of any PM<sub>2.5</sub>-precursor using a ratio approved by the board for the nonattainment area after public review and comment as provided in subsections O and P of this section. Prior to making a final determination on the interpollutant trading ratios for a nonattainment area, the board shall submit the interpollutant trading ratios and

supporting information to the EPA Regional Office for approval.

- $\Theta$ . N. Prior to the decision of the board, the offsetting ratio will be subject to a public comment period of at least 30 days. The board will notify the public, by notice on the department web page "Public Notices for Air Regulations," of the opportunity for public comment on the offsetting ratio and supporting information as available for public inspection under the provisions of subsection P O of this section. The notification shall be published at least 30 days prior to the close of the public comment period.
- P. O. Information on the offsetting ratio and supporting information, as well as the preliminary determination of the board, shall be available for public inspection during the entire public comment period on the department web page "Public Notices for Air Regulations."

VA.R. Doc. No. R20-6031; Filed January 6, 2020, 3:02 p.m.

#### STATE WATER CONTROL BOARD

#### **Final Regulation**

REGISTRAR'S NOTICE: The State Water Control Board is claiming an exemption from Article 2 of the Administrative Process Act in accordance with § 2.2-4006 A 3, which excludes regulations that consist only of changes in style or form or corrections of technical errors. The State Water Control Board will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

# <u>Title of Regulation:</u> **9VAC25-390. Water Resources Policy** (amending **9VAC25-390-20**).

<u>Statutory Authority:</u> §§ 62.1-44.15 and 62.1-44.36 of the Code of Virginia.

Effective Date: March 4, 2020.

Agency Contact: Melissa Porterfield, Department of Environmental Quality, 1111 East Main Street, Suite 1400, P.O. Box 1105, Richmond, VA 23218, telephone (803) 698-4238, or email melissa.porterfield@deq.virginia.gov.

<u>Small Business Impact Review Report of Findings:</u> This final regulatory action serves as the report of the findings of the regulatory review pursuant to § 2.2-4007.1 of the Code of Virginia.

#### Summary:

The amendments correct a cross reference to the Code of Virginia and the name of the Ground Water Management Act.

#### 9VAC25-390-20. Responsibilities.

The board has established its Water Resources Policy in order to fulfill its statutory responsibilities under § 62.1-44.36 of the Code of Virginia, as follows:

- 1. Assure, insofar as possible, that domestic, municipal, industrial, agricultural, and other water quality and quantity needs are met at all times consistent with the responsibility of the Commonwealth to protect the natural values of Virginia's water resources, and to assure equitable allocation in times of shortage consistent with the requirements of Virginia law;
- 2. Protect wetlands in recognition of the dependence of these natural systems upon suitable water quality and in recognition of the contribution of these natural systems to natural values;
- 3. Recognize the importance of water transportation to the economy and recreation, and to assure the optimum use of the waterways of Virginia;
- 4. Recognize and foster the unique and diverse role of water in recreation:
- 5. To the maximum extent practicable, minimize hazards from floods to human life and to economic and natural values;
- 6. Assure that ground water groundwater withdrawals do not, on the average, exceed recharge, and protect any existing common law or statutory rights to use of ground waters groundwaters;
- 7. Provide policy guidance on the allocation of ground water groundwater in considering the issuance of groundwater permits within groundwater management areas under § 62.1 644.100 § 62.1-254 of the Code of Virginia (The Groundwater (Ground Water Management Act of 1973) 1992);
- 8. Exercise the responsibility of the Commonwealth within the framework of the existing common law riparian rights of land owners;
- 9. Evaluate the effect of projects and structures on:
- a. Flexibility in future water resource use and project operation;
- b. Cost effectiveness within the realistic alternatives available and within the constraints of public health and public safety;
- c. Man-made historic and the natural environments;
- d. The recommendations of other agencies with an interest in the projects and structures; and
- e. Local, regional, and statewide land use plans and growth policies;
- 10. Minimize the bureaucratic process in order to facilitate cost effective implementation of water resources policy;
- 11. Assure that the management demands of a water resource project do not exceed the capability of that unit of government responsible for its operation and maintenance;

- 12. Take advantage of all federal water resource programs to the extent that these programs can provide timely assistance;
- 13. Promote technological innovations and be responsive to the institution of such advancements;
- 14. Encourage maximum public participation in the formulation and implementation of specific plans and projects; and
- 15. Recognize the importance of the preservation of critical reservoir sites for future water needs.

VA.R. Doc. No. R20-5982; Filed January 6, 2020, 2:50 p.m.

# **Final Regulation**

REGISTRAR'S NOTICE: The State Water Control Board is claiming an exemption from Article 2 of the Administrative Process Act in accordance with § 2.2-4006 A 3, which excludes regulations that consist only of changes in style or form or corrections of technical errors. The State Water Control Board will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

<u>Title of Regulation:</u> 9VAC25-401. Sewage Treatment in the Dulles Area Watershed (amending 9VAC25-401-30, 9VAC25-401-40).

Statutory Authority: § 62.1-44.15 of the Code of Virginia.

Effective Date: March 4, 2020.

Agency Contact: Melissa Porterfield, Department of Environmental Quality, 1111 East Main Street, Suite 1400, P.O. Box 1105, Richmond, VA 23218, telephone (803) 698-4238, or email melissa.porterfield@deq.virginia.gov.

<u>Small Business Impact Review Report of Findings:</u> This final regulatory action serves as the report of the findings of the regulatory review pursuant to § 2.2-4007.1 of the Code of Virginia.

#### Summary:

The amendments correct a cross reference to another Virginia Administrative Code section and a typographical error in the regulation.

# 9VAC25-401-30. Sewage treatment plant restrictions and requirements.

- A. The number of sewage treatment plants discharging effluent to surface waters identified in 9VAC25-401-20 shall be no more than two, one to be under the authority of the Town of Leesburg and one under the authority of Loudoun County. The discharge from the treatment plants shall be in the Broad Run and Goose Creek Watersheds a minimum of 10 stream miles upstream from the Fairfax County Water Authority water supply intake on the Potomac River.
- B. The following maximum effluent limitations shall apply for the sewage treatment plants prescribed in subsection A of this section:

Parameter	Monthly Average	
COD	10.0 mg/l	
TSS	1.0 mg/l	
TKN	1.0 mg/l	
Total <del>Phosphous</del> <u>Phosphorus</u>	0.1 mg/l	
Turbidity	0.5 NTU	
E. coli	less than 2 per 100 ml	

The above parameters and all other pollutants shall also be monitored and limited as necessary in accordance with the VPDES Permit Regulation.

The owners of the sewage treatment plants are responsible for knowing nitrate concentrations in the vicinity of Fairfax County Water Authority's intake on the Potomac River. Should nitrate concentrations at the intake reach 5 mg/l, the owners shall evaluate measures they can take to minimize impacts their discharge has on the nitrate concentrations and implement those measures deemed feasible and effective.

- C. Requirements for sewage treatment plants in subsection A of this section.
- 1. The design shall be such that expansions and maintenance of any unit can be accomplished without bypassing wastes to the receiving waters and without degrading treatment.
- 2. The mechanical and fluid system design shall be such that a single failure of a component or unit shall not interrupt plant operations that are required to meet the final effluent requirements in subsection B of this section.
- 3. There shall be one independent source of outside power supply and one on-site power supply. Both the off-site and on-site electrical distributions shall be such that the failure of any one given component (mechanical or electrical) in the distribution system shall not cause an interruption of electrical service to parts of the plant that are essential to meet the effluent requirements.
- 4. The treatment plants shall be staffed 24 hours a day, seven days a week.
- D. Design requirements for pumping stations for sewage treatment plants in subsection A of this section. Pumping stations on all sewage collection systems that are connected to the plants identified in subsection A of this section shall meet the Reliability Classification 1 requirements as described in the Virginia Sewage Collection and Treatment Regulations (9VAC25-790), and shall have retention basins with a minimum of one-day capacity. A waiver from the retention basin requirement may be obtained from the Department of Environmental Quality if the owner of the pump station can demonstrate that a sewer system tributary to the pump station meets the infiltration/inflow infiltration or inflow criteria

established by the <del>Virginia</del> Sewage Collection and Treatment Regulations, and any other such information that the department may require.

# 9VAC25-401-40. Exceptions.

The following exceptions to 9VAC25-401-30 A may be allowed on a case-by-case basis after review and approval by the Department of Environmental Quality:

- 1. Existing sewage treatment plants. Existing sewage treatment plants located in the affected waters and not authorized by 9VAC25 400 30 9VAC25-401-30 A may continue to discharge to surface waters provided they were constructed prior to January 1975. Such discharges may continue only as long as the Department of Environmental Quality determines that it is not feasible for them to connect to a publicly owned sewage treatment plant. Expansions of these treatment works may be allowed as long as pollutant quantities or loadings are not increased.
- 2. Failing septic systems. Existing residential homes, industrial and commercial operations, public facilities, and any other operation where a septic drain field system has failed may discharge treated sewage effluent provided that the applicant demonstrates that it is not feasible to connect to a publicly owned sewage treatment plant and that there is no feasible alternative except to discharge. Discharge permits shall be issued in conformance with the State Water Control Law, the Virginia VPDES Permit Regulation (9VAC25-31), and the Water Quality Standards (9VAC25-260).

VA.R. Doc. No. R20-5983; Filed January 6, 2020, 2:46 p.m.

# TITLE 13. HOUSING

# BOARD OF HOUSING AND COMMUNITY DEVELOPMENT

## **Proposed Regulation**

REGISTRAR'S NOTICE: The Board of Housing and Community Development is claiming an exemption from Article 2 of the Administrative Process Act pursuant to § 2.2-4006 A 12 of the Code of Virginia, which excludes regulations adopted by the Board of Housing and Community Development pursuant to the Statewide Fire Prevention Code (§ 27-94 et seq.), the Industrialized Building Safety Law (§ 36-70 et seq.), the Uniform Statewide Building Code (§ 36-97 et seq.), and § 36-98.3 of the Code of Virginia, provided the board (i) provides a Notice of Intended Regulatory Action in conformance with the provisions of § 2.2-4007.01, (ii) publishes the proposed regulation and provides an opportunity for oral and written comments as provided in § 2.2-4007.03, and (iii) conducts at least one public hearing as provided in §§ 2.2-4009 and 36-100 prior to

the publishing of the proposed regulations. The Board of Housing and Community Development will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

<u>Title of Regulation:</u> 13VAC5-31. Virginia Amusement Device Regulations (amending 13VAC5-31-20, 13VAC5-31-30, 13VAC5-31-40, 13VAC5-31-75; adding 13VAC5-31-300).

Statutory Authority: § 36-98.3 of the Code of Virginia.

# **Public Hearing Information:**

March 16, 2020 - 10 a.m. - Virginia Housing Development Authority Virginia Housing Center, 4224 Cox Road, Glen Allen, Virginia 23060.

Public Comment Deadline: April 6, 2020.

Agency Contact: Kyle Flanders, Senior Policy Analyst, Department of Housing and Community Development, Main Street Centre, 600 East Main Street, Suite 300, Richmond, VA 23219, telephone (804) 786-6761, FAX (804) 371-7090, TTY (804) 371-7089, or email kyle.flanders@dhcd.virginia.gov.

<u>Small Business Impact Review Report of Findings:</u> This proposed regulatory action serves as the report of the findings of the regulatory review pursuant to § 2.2-4007.1 of the Code of Virginia.

Background: The Virginia Amusement Device Regulations (VADR) govern the construction and operation of amusement devices, which by statutory definition are devices or structures open to the public by which persons are conveyed or moved in an unusual manner for diversion or are passenger tramways. The regulations are closely related to the Uniform Statewide Building Code (USBC), and under state law the USBC applies to amusement devices to the extent that the VADR does not set out differing requirements. Both regulations incorporate nationally recognized model building codes and standards as the basis for the technical provisions of the regulation. Every three years, new editions of the model codes become available. At that time, the Board of Housing and Community Development initiates a regulatory action to incorporate the newest editions of the model codes into the regulation as well as accepting proposals for changes to the regulation from affected client groups and the public.

# Summary:

The proposed amendments include the following:

In 13VAC5-31-20, two definitions are added to allow for the regulation of trampoline parks via the VADR;

In 13VAC5-31-75, requirements are clarified that the submission of location, operator, event duration, device details, and proof of insurance must happen three days in advance of operation;

In 13VAC5-31-300, a new section regarding trampoline courts is added that specifies that trampoline courts shall be regulated in accordance with ASTM F2970; and

Documents incorporated by reference are updated to include new standard numbers and addresses for the authoring entities.

#### 13VAC5-31-20. Definitions.

A. The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Amusement device" means (i) a device or structure open to the public by which persons are conveyed or moved in an unusual manner for diversion, but excluding snow tubing parks and rides, ski terrain parks, ski slopes, and ski trails, and (ii) passenger tramways. For the purpose of this definition, the phrase "open to the public" means that the public has full access to a device or structure at an event, irrespective of whether a fee is charged. The use of devices or structures at private events is not considered to be open to the public.

"Bungee cord" means the elastic rope to which the jumper is attached which lengthens and shortens to produce a bouncing action.

"Carabineer" means a shaped metal device with a gate used to connect sections of a bungee cord, jump rigging, equipment, or safety gear.

"Certificate of inspection" means the certificate or sticker for amusement devices distributed by DHCD.

"DHCD" means the Virginia Department of Housing and Community Development.

"Gravity ride" means a ride that is installed on an inclined surface, which depends on gravity for its operation to convey a passenger from the top of the incline to the bottom, and which conveys a passenger in or on a carrier tube, bag, bathing suit, or clothes.

"Ground operator" means a person who assists the jump master to prepare a jumper for jumping.

"Harness" means an assembly to be worn by a bungee jumper to be attached to a bungee cord. It is designed to prevent the wearer from becoming detached from the bungee system.

"Institutional trampoline" means a trampoline intended for use in a commercial or institutional facility.

"Jump master" means a person who has responsibility for the bungee jumper and who takes the jumper through the final stages to the actual jump.

"Jump zone" means the space bounded by the maximum designed movements of the bungee jumper.

"Jumper" means the person who departs from a height attached to a bungee system.

"Landing area" means the surface area of ground or water directly under the jump zone, the area where the lowering device moves the bungee jumper to be landed away from the jump space and the area covered by the movement of the lowering device.

"Local building department" means the agency or agencies of the governing body of any city, county or town in this Commonwealth charged with the enforcement of the USBC.

"Operating manual" means the document that contains the procedures and forms for the operation of bungee jumping equipment and activity at a site.

"Passenger tramway" means a device used to transport passengers uphill, and suspended in the air by the use of steel cables, chains or belts, or ropes, and usually supported by trestles or towers with one or more spans.

"Platform" means the equipment attached to the structure from which the bungee jumper departs.

"Private inspector" means a person performing inspections who is independent of the company, individual or organization owning, operating or having any vested interest in an amusement device being inspected.

"Small mechanical ride" means an amusement device, other than an inflatable amusement device, where (i) the assembly time for the device is two hours or less, (ii) the revolutions per minute of any rotation of the components of the device is not greater than seven, (iii) the device has a footprint of less than 500 square feet, and (iv) the device does not invert a patron or lift a patron more than three feet in the air, measured from the ground to the bottom of the patron's feet when the device is operating.

<u>"Trampoline court" means a defined area comprising one or more institutional trampolines or a series of institutional trampolines.</u>

"Ultimate tensile strength" means the greatest amount of load applied to a bungee cord prior to failure.

"USBC" means the Virginia Uniform Statewide Building Code (13VAC5-63).

- B. Words and terms used in this chapter which are defined in the USBC shall have the meaning ascribed to them in that regulation unless the context clearly indicates otherwise.
- C. Words and terms used in this chapter which are defined in the standards incorporated by reference in this chapter shall have the meaning ascribed to them in those standards unless the context clearly indicates otherwise.

# 13VAC5-31-30. Devices covered and exempt.

A. The following devices, identified by name or description, when open to the public shall be considered amusement devices subject to this chapter. The list is intended only to clarify questionable devices, while the definition of an "amusement device" in 13VAC5-31-20 is generally used to determine the applicability of this chapter.

- 1. Inflatable amusement devices; and
- 2. Zip lines; and
- 3. Trampoline courts.
- B. The following equipment or devices shall not be considered amusement devices subject to this chapter:
  - 1. Nonmechanized playground or recreational equipment such as swing sets, sliding boards, climbing bars, jungle gyms, skateboard ramps and similar equipment where no admission fee is charged for its use or for admittance to areas where the equipment is located;
  - 2. Coin-operated rides designed to accommodate three or less passengers;
  - 3. Water slides or similar equipment used in community association, community club or community organization swimming pools;
  - 4. Mechanical bulls or similar devices;
  - 5. Devices known as mall trains, shopping mall trains, or electric trackless trains for malls; and
  - 6. Devices known as water walking balls, euro bubbles, or similar devices.

#### 13VAC5-31-40. Incorporated standards.

- A. The following standards are hereby incorporated by reference for use as part of this chapter:
  - 1. American National Standards Institute (ANSI) Standard No. B77.1 2011 B77.1-2017 for the regulation of passenger tramways; and
  - 2. American Society for Testing and Materials (ASTM) Standard Nos. F747-15, F770-15 F770-18, F1159-15b F1159-16, F1193-16 F1193-18, F1957-99 (2011) (2017), F2007-12 F2007-18, F2137-16 F2137-18, F2291-15 F2291-18, F2374-10 F2374-17, F2375-09 (2017), F2376-13 F2376-17a, F2460-11, F2461-18, F2959-16 F2959-18, F2970-17, and F2974-15 F2974-19 for the regulation of amusement devices.

The standards referenced above may be procured from:

ANSI ASTM

25 W 43rd Street 100 Barr Harbor Dr. New York, NY West Conshohocken, PA

10036 19428-2959

- B. The provisions of this chapter govern where they are in conflict with any provisions of the standards incorporated by reference in this chapter.
- C. The following requirements supplement the provisions of the ASTM standards incorporated by reference in this chapter:
  - 1. The operator of an amusement device shall be at least 16 years of age, except when the person is under the supervision of a parent or guardian and engaged in activities determined not to be hazardous by the Commissioner of the Virginia Department of Labor and Industry;
  - 2. The amusement device shall be attended by an operator at all times during operation except that (i) one operator is permitted to operate two or more amusement devices provided they are within the sight of the operator and operated by a common control panel or station and (ii) one operator is permitted to operate two small mechanical rides with separate controls provided the distance between controls is no more than 35 feet and the controls are equipped with a positive pressure switch; and
  - 3. The operator of an amusement device shall not be (i) under the influence of any drugs which may affect the operator's judgment or ability to assure the safety of the public or (ii) under the influence of alcohol.
- D. Where an amusement device was manufactured under previous editions of the standards incorporated by reference in this chapter, the previous editions shall apply to the extent that they are different from the current standards.

## Part II

Enforcement, Permits and Certificates of Inspection

#### 13VAC5-31-75. Local building department.

A. In accordance with §§ 36-98.3 and 36-105 of the Code of Virginia, the local building department shall be responsible for the enforcement of this chapter and may charge fees for such enforcement activity. The total amount charged for any one permit to operate an amusement device or devices or the renewal of such permit shall not exceed the following, except that when a private inspector is used by the owner or operator of the device, the fees shall be reduced by 75%:

- 1. \$35 for each small mechanical ride or inflatable amusement device covered by the permit;
- 2. \$55 for each circular ride, institutional trampoline, or flat-ride less than 20 feet in height covered by the permit;
- 3. \$75 for each spectacular ride covered by the permit that cannot be inspected as a circular ride or flat-ride in subdivision 2 of this subsection due to complexity or height;

- 4. \$200 for each coaster covered by the permit that exceeds 30 feet in height; and
- 5. The local building department may charge an additional fee for permits and inspections of generators and associated wiring for amusement device events. Generators subject to these fees are those used exclusively with amusement devices and that are inspected by the local building department. The fee per event shall not exceed \$165 and shall not exceed the actual cost to perform the inspection or inspections.

Exception: Small portable generators serving only cord and plug connected equipment loads are not subject to the fee.

Notwithstanding the fee limitations established in this section, the local building department shall be permitted to increase the fees up to 50% when requested to perform weekend or after-hour inspections.

- B. Notwithstanding the provisions of subsection A of this section, when an amusement device is constructed in whole or in part at a site for permanent operation at that site and is not intended to be disassembled and moved to another site, then the local building department may utilize permit and inspection fees established pursuant to the USBC to defray the cost of enforcement. This authorization does not apply to an amusement device that is only being reassembled, undergoing a major modification at a site or being moved to a site for operation.
- C. A permit application shall be made to the local building department at least five days before the date in which the applicant intends to operate an amusement device. The application shall include the name of the owner, operator or other person assuming responsibility for the device, a general description of the device including any serial or identification numbers available, the location of the property on which the device will be operated, and the length of time of operation. The permit application shall indicate whether a private inspector will be used. If a private inspector is not used, the applicant shall give reasonable notice when an inspection is sought and may stipulate the day such inspection is requested provided it is during the normal operating hours of the local building department. In addition to the information required on the permit application, the applicant shall provide proof of liability insurance of an amount not less than \$1 million per occurrence or proof of equivalent financial responsibility. The local building department shall be notified of any change in the liability insurance or financial responsibility during the period covered by the permit.
- D. Notwithstanding the provisions of subsection C of this section, a permit application is not required for a small mechanical ride or an inflatable amusement device that has a certificate of inspection issued by any local building department in this Commonwealth either <u>for (i)</u> a six-month period for <u>a</u> small mechanical <u>rides</u> <u>ride</u> or <u>(ii)</u> within a one-

- year period for an inflatable amusement devices device prior to the dates the small mechanical ride or inflatable amusement device is to be used, regardless of whether the device has been disassembled and moved to a new site. In such cases, the local building department shall be notified at least three days prior to the operation of the small mechanical ride or the inflatable amusement device and the and provided with the information required on a permit application as listed in subsection C of this section shall be provided to the local building department at least three days prior to operation. In addition, and notwithstanding the provisions of subsection A of this section, the local building department shall be permitted to charge a \$50 inspection fee per event to the person notifying the local building department of an event where an inflatable amusement device is operating if the local building department chooses to inspect any or all of the inflatable amusement devices operating at that event. An inspection report shall be provided to the person notifying the local building department of the event if such an inspection is conducted.
- E. Local building department personnel shall examine the permit application within five days and issue the permit if all requirements are met. A certificate of inspection for each amusement device shall be issued when the device has been found to comply with this chapter by a private inspector or by an inspector from the local building department. It shall be the responsibility of the local building department to verify that the private inspector possesses a valid certificate of competence as an amusement device inspector from the Virginia Board of Housing and Community Development. In addition, local building department personnel shall be responsible for assuring that the certificate of inspection is posted or affixed on or in the vicinity of the device in a location visible to the public. Local building department personnel shall post or affix such certificates or permit the certificates to be posted or affixed by the private inspector. Permits shall indicate the length of time the device or devices will be operated at the site, clearly identify the device or devices to which it applies and the date of expiration of the permit. Permits shall not be valid for longer than one year, except that permits for small mechanical rides shall not be valid for longer than six months.
- F. In addition to obtaining a certificate of inspection in conjunction with a permit application for amusement devices permanently fixed to a site, a new certificate of inspection shall also be obtained prior to the operation of an amusement device following a major modification, prior to each seasonal operation of a device, at least once during the operating season and prior to resuming the operation of a device following an order from a local building department to cease operation. This requirement shall not apply to small mechanical rides meeting the conditions outlined in subsection D of this section.

- G. For amusement devices manufactured prior to 1978, the owner or operator shall have the information required by 10.1 through 10.6 of ASTM F1193 available at the time of inspection. In addition, the operator of any amusement device shall be responsible for obtaining all manufacturer's notifications, service bulletins and safety alerts issued pursuant to ASTM F770 and the operator shall comply with all recommendations and requirements set out in those documents. A copy of all such documents shall be made available during an inspection.
- H. In the enforcement of this chapter, local building department personnel shall have authority to conduct inspections at any time an amusement device would normally be open for operation or at any other time if permission is granted by the owner or operator, to issue an order to temporarily cease operation of an amusement device upon the determination that the device may be unsafe or may otherwise endanger the public and to accept and approve or deny requests for modifications of the rules of this chapter in accordance with the modification provisions of the USBC.
- I. In accordance with subdivision 7 of § 36-137 of the Code of Virginia, the local building department shall collect a 2.0% levy of fees charged for permits under this chapter and transmit it quarterly to DHCD to support training programs of the Virginia Building Code Academy. Localities that maintain individual or regional training academies accredited by DHCD shall retain such levy.
- J. In accordance with § 36-98.3 of the Code of Virginia and 13VAC5-31-10 B, the procedures for violations of this chapter shall be as prescribed in the USBC.

K. In accordance with § 36-98.1 of the Code of Virginia, the Virginia Department of General Services (DGS) shall function as the local building department for the application of this chapter to amusement devices located on state-owned property. In accordance with §§ 36-98.2 and 36-114 of the Code of Virginia, appeals of the application of this chapter by the DGS shall be made directly to the State Building Code Technical Review Board. Further, as a condition of this chapter, such appeals shall be filed within 14 calendar days after receipt of the decision of DGS.

# Part XI Trampoline Courts

## 13VAC5-31-300. Trampoline courts.

In addition to other applicable requirements of this chapter, trampoline courts shall be operated, maintained, and inspected in accordance with ASTM F2970.

DOCUMENTS INCORPORATED BY REFERENCE (13VAC5-31)

ANSI B77.1 2011 B77.1-2017, Passenger Ropeways – Aerial Tramways, Aerial Lifts, Surface Lifts, Tows and Conveyors – Safety Requirements Standard, American

National Standards Institute (ANSI), 25 West 43rd Street, 4th Floor, New York, NY 10036 (http://www.ansi.org/)

American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959; (http://www.astm.org/):

ASTM F747-15, Standard Terminology Relating to Amusement Rides and Devices

ASTM F770-15 F770-18, Standard Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices

ASTM F1159-15b F1159-16, Standard Practice for Design of Amusement Rides and Devices that are Outside the Purview of Other F24 Design Standards

ASTM <del>F1193-16</del> F1193-18, Standard Practice for Quality, Manufacture, and Construction of Amusement Rides and Devices

ASTM F1957-99 (2011) (2017), Standard Test Method for Composite Foam Hardness-Durometer Hardness

ASTM F2007-12 F2007-18, Standard Practice for Classification, Design, Manufacture, and Operation of Concession Go-Karts and Facilities

ASTM F2137-16 F2137-18, Standard Practice for Measuring the Dynamic Characteristics of Amusement Rides and Devices

ASTM <u>F2291-15</u> <u>F2291-18</u>, Standard Practice for Design of Amusement Rides and Devices

ASTM F2374-10 F2374-17, Standard Practice for Design, Manufacture, Operation, and Maintenance of Inflatable Amusement Devices

ASTM F2375-09 (2017), Standard Practice for Design, Manufacture, Installation and Testing of Climbing Nets and Netting/Mesh used in Amusement Rides, Devices, Play Areas and Attractions

ASTM F2376-13 F2376-17a, Standard Practice for Classification, Design, Manufacture, Construction, and Operation of Water Slide Systems

ASTM F2460-11, Standard Practice for Special Requirements for Bumper Boats

ASTM F2461-18, Standard Practice for Manufacture, Construction, Operation and Maintenance of Aquatic Play Equipment

ASTM <del>F2959-16</del> <u>F2959-18</u>, Standard Practice for Aerial Adventure Courses

ASTM <u>F2974-15</u> <u>F2974-19</u>, Standard Guide for Auditing Amusement Rides and Devices

ASTM F2970-17, Standard Practice for Design, Manufacture, Installation, Operation, Maintenance, Inspection and Major Modification of Trampoline Courts

VA.R. Doc. No. R19-5883; Filed January 7, 2020, 2:20 p.m.

# **Proposed Regulation**

REGISTRAR'S NOTICE: The Board of Housing and Community Development is claiming an exemption from Article 2 of the Administrative Process Act pursuant to § 2.2-4006 A 12 of the Code of Virginia, which excludes regulations adopted by the Board of Housing and Community Development pursuant to the Statewide Fire Prevention Code (§ 27-94 et seg.), the Industrialized Building Safety Law (§ 36-70 et seq.), the Uniform Statewide Building Code (§ 36-97 et seq.), and § 36-98.3 of the Code of Virginia, provided the board (i) provides a Notice of Intended Regulatory Action in conformance with the provisions of § 2.2-4007.01, (ii) publishes the proposed regulation and provides an opportunity for oral and written comments as provided in § 2.2-4007.03, and (iii) conducts at least one public hearing as provided in §§ 2.2-4009 and 36-100 prior to the publishing of the proposed regulations. The Board of Housing and Community Development will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

<u>Title of Regulation:</u> 13VAC5-51. Virginia Statewide Fire Prevention Code (amending 13VAC5-51-21, 13VAC5-51-31, 13VAC5-51-61, 13VAC5-51-91, 13VAC5-51-130 through 13VAC5-51-135.5, 13VAC5-51-138.4 through 13VAC5-51-141, 13VAC5-51-142 through 13VAC5-51-144.6, 13VAC5-51-144.8 through 13VAC5-51-155; adding 13VAC5-51-138.1).

Statutory Authority: § 27-97 of the Code of Virginia.

**Public Hearing Information:** 

March 16, 2020 - 10 a.m. - Virginia Housing Development Authority Virginia Housing Center, 4224 Cox Road, Glen Allen, Virginia 23060

Public Comment Deadline: April 6, 2020.

Agency Contact: Kyle Flanders, Senior Policy Analyst, Department of Housing and Community Development, Main Street Centre, 600 East Main Street, Suite 300, Richmond, VA 23219, telephone (804) 786-6761, FAX (804) 371-7090, TTY (804) 371-7089, or email kyle.flanders@dhcd.virginia.gov.

<u>Small Business Impact Review Report of Findings:</u> This proposed regulatory action serves as the report of the findings of the regulatory review pursuant to § 2.2-4007.1 of the Code of Virginia.

<u>Background:</u> The Statewide Fire Prevention Code (SFPC) is a regulation governing the maintenance of the fire protection aspects of existing structures and operational functions

relating to fire safety wherever located, including the regulation of the use of explosives and blasting and fireworks displays. The SFPC uses a nationally recognized model code produced by the International Code Council as the basis for the technical provisions of the regulation. Every three years, a new edition of the model code becomes available. At that time, the Board of Housing and Community Development initiates a regulatory action to incorporate the newest edition of the model code into the regulation as well as accepting proposals for changes to the regulation from affected client groups and the public.

# Summary:

The proposed amendments are as follows:

13VAC5-51: Throughout the chapter, update references from "applicable building code" to the specific chapter of the International Fire Code, National Fire Protection Association (NFPA) standard, or other standard.

13VAC5-51-130: Update the definition of the term "corrosive" to include specific pH values and add definitions for the terms "permissible fireworks" and "emergency supplemental hardware."

13VAC5-51-131: Add a restriction on combustible storage under bridges and along roadways.

13VAC5-51-132: Add provisions and parameters to allow the use of emergency supplemental hardware.

13VAC5-51-135.5: Remove language subjecting security devices to approval by the fire official and instead require a permit under the Uniform Statewide Building Code.

13VAC5-51-138.4: Update the section for foam protection for rooftop heliports.

13VAC5-51-138.8: Several updates reference the specific chapter and NFPA standard instead of using the blanket terminology "applicable building code" and add a section for Type II systems in dry cleaning operations and firefighting access for such operations.

13VAC5-51-140: Add provisions for disconnect switches and fuel shot off parameters, including (i) adding provisions for special containers and enclosures; (ii) adding a section for repair garages for lighter than air fuels (CNG, LNG, hydrogen); (iii) adding provisions and updating the sections for spray booths, spray applications, and the ventilation requirements for such; and (iv) updating dip-tank operations sections and the volumetric limitations and provisions pertaining to each level of liquid capacity.

13VAC5-51-141: Update the requirements for ethylene generator rooms and the air circulation requirements.

13VAC5-51-142.5: Update the requirements for dust control, explosion venting, and the storage and removal of waste from lumber yards and other woodworking facilities.

13VAC5-51-143.5: Add restrictions for nitrocellulose in mills.

13VAC5-51-144: Restore a section regarding manual fuel shutoff valves.

13VAC5-51-144.2: Add "temporary special event structures" to the scope section, add size and square footage restrictions for tents and other membrane structures, and add a list of documents required to be submitted with an operational permit for membrane structures.

13VAC5-51-144.4: Add requirements for a "high-piled storage operational plan."

13VAC5-51-144.6: Restore a section requiring buffing operations be located in a separate part of the building in which tire rebuilding occurs.

13VAC5-51-145: Add a new term "permissible fireworks" to Table 5003.1.1(1) and change the quantities allowable for such.

13VAC5-51-146.5: Add sections for compressed gas storage and protections against dangers related.

Other proposed changes are for clarification or correlation.

# 13VAC5-51-21. Section 102 Applicability.

A. 102.1 General. The provisions of the SFPC shall apply to all matters affecting or relating to structures, processes, and premises as set forth in Section 101. The SFPC shall supersede any fire prevention regulations previously adopted by a local government or other political subdivision.

B. 102.1.1 Change of occupancy. No change of occupancy shall be made in any building or structure unless such building or structure is made to comply with the requirements of the USBC as determined by the building official.

C. 102.2 Application to pre-1973 buildings and structures. Buildings and structures constructed prior to the USBC (1973) shall comply with the maintenance requirements of the SFPC to the extent that equipment, systems, devices, and safeguards which were provided and approved when constructed shall be maintained. Such buildings and structures, if subject to the state fire and public building regulations (Virginia Public Building Safety Regulations, VR 394-01-05) in effect prior to March 31, 1986, shall also be maintained in accordance with those regulations.

D. 102.3 Application to post-1973 buildings and structures. Buildings and structures constructed under any edition of the USBC shall comply with the maintenance requirements of the SFPC to the extent that equipment, systems, devices, and

safeguards which were provided and approved when constructed shall be maintained.

E. 102.4 Referenced codes and standards. The codes and standards referenced in the IFC shall be those listed in Chapter 80 and considered part of the requirements of the SFPC to the prescribed extent of each such reference. Where differences occur between the provisions of this code and the referenced standards, the provisions of this code shall apply.

F. 102.5 State-owned buildings and structures. The SFPC shall be applicable to all state-owned buildings and structures in the manner and extent described in § 27-99 of the Code of Virginia and the State Fire Marshal shall have the authority to enforce this code in state-owned buildings and structures as is prescribed in §§ 27-98 and 27-99 of the Code of Virginia.

G. 102.6 Relationship to USBC. In accordance with §§ 27-34.4, 36-105.1, and 36-119.1 of the Code of Virginia, the USBC does not supersede the provisions of this code that prescribe standards to be complied with in existing buildings and structures, provided that this code shall not impose requirements that are more restrictive than those of the USBC under which the buildings or structures were constructed. Subsequent alteration, enlargement, rehabilitation, repair, or conversion of the occupancy classification of such buildings and structures shall be subject to the construction and rehabilitation provisions of the USBC. Inspection of buildings other than state-owned buildings under construction and the review and approval of building plans for these structures for enforcement of the USBC shall be the sole responsibility of the appropriate local building inspectors.

Upon completion of such structures, responsibility for fire safety protection shall pass to the local fire marshal or official designated by the locality to enforce this code in those localities that enforce the SFPC or to the State Fire Marshal in those localities that do not enforce this code.

H. 102.7 Inspections for USBC requirements. The fire official shall require that existing structures subject to the requirements of the applicable retrofitting provisions relating to the fire protection equipment and system requirements of the USBC, Part I II, Construction Existing Buildings, Section 103.7 1101, comply with the provisions located therein.

## 13VAC5-51-31. Section 103 Incorporation by reference.

A. 103.1 General. The following document is adopted and incorporated by reference to be an enforceable part of the SFPC:

The International Fire Code -- 2015 2018 Edition, hereinafter referred to as "IFC," published by the International Code Council, Inc., 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001-2070, 1-888 422-7233.

B. 103.1.1 Deletion. Delete IFC Chapter 1.

C. 103.1.2 Appendices. The appendices in the IFC are not considered part of the IFC for the purposes of Section 103.1.

Note: Section 101.5 references authority contained in the Code of Virginia for local fire prevention regulations that may be evaluated by localities to determine whether provisions in the IFC appendices may be considered for local fire prevention regulations.

D. 103.2 Amendments. All requirements of the referenced codes and standards that relate to fees, non-operational permits not specifically required by Section 107.2, unsafe notices, disputes, condemnation, inspections, scope of enforcement and all other procedural, and administrative matters are deleted and replaced by the provisions of Chapter 1 of the SFPC.

Exception: The scope of referenced codes and standards referenced by the SFPC that relate to the maintenance, testing and inspection requirements or limitations shall be enforceable.

E. 103.2.1 Other amendments. The SFPC contains provisions adopted by the Virginia Board of Housing and Community Development (BHCD), some of which delete, change or amend provisions of the IFC and referenced standards. Where conflicts occur between such changed provisions and the unchanged provisions of the IFC and referenced standards, the provisions changed by the BHCD shall govern.

Note 4: The IFC and its referenced standards contain some areas of regulation outside of the scope of the SFPC, as established by the BHCD and under state law. Where conflicts have been readily noted, changes have been made to the IFC and its referenced standards to bring it within the scope of authority; however, in some areas, judgment will have to be made as to whether the provisions of the IFC and its referenced standards are fully applicable.

Note 2: Section numbers preceded by "(N)" indicate sections of the IFC that have been changed to remove construction related provisions that are outside of the scope of the SFPC.

F. 103.3 International Fire Code. Retroactive fire protection system requirements contained in the IFC shall not be enforced unless specified by the USBC.

# 13VAC5-51-61. Section 106 Duties and powers of the fire official.

A. 106.1 General. The fire official shall enforce the provisions of the SFPC as provided herein and as interpreted by the State Review Board in accordance with § 36-118 of the Code of Virginia.

B. 106.2 Delegation of duties and powers. The fire official may delegate duties and powers subject to any limitations imposed by the local governing body. The fire official shall

be responsible that any powers and duties delegated are carried out in accordance with this code.

C. 106.3 Inspections. The fire official is authorized to conduct such inspections as are deemed necessary to determine the extent of compliance with the provisions of this code and to approve reports of inspection by approved agencies or individuals in accordance with the fire official's written policy. All reports of such inspections by approved agencies or individuals shall be prepared and submitted in writing for review and approval. Inspection reports shall be certified by a responsible officer of such approved agency or by the responsible individual. The fire official is authorized to engage such expert opinion as deemed necessary to report upon unusual, detailed or complex technical issues in accordance with local policies.

D. 106.3.1 Observations. When, during an inspection, the fire official or an authorized representative observes an apparent or actual violation of another law, ordinance or code not within the official's authority to enforce, such official shall report the findings to the official having jurisdiction in order that such official may institute the necessary measures.

E. 106.4 Alternatives. The SFPC provisions are not intended to prevent the use of any safeguards used to protect life and property from the hazards of fire or explosion that are not specifically prescribed by the SFPC, provided that such alternative safeguards comply with the intent of the SFPC. The alternative safeguard offered shall be, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

F. 106.5 Modifications. The fire official may grant modifications to any provision of the SFPC upon application by the owner or the owner's agent provided the spirit and intent of the SFPC are observed and public health, welfare, and safety are assured.

Note: The current editions of many nationally recognized model codes and standards are referenced by the SFPC. Future amendments to such codes and standards do not automatically become part of the SFPC; however, the fire official should consider such amendments in deciding whether a modification request should be granted.

G. 106.5.1 Supporting data. The fire official shall require that sufficient technical data be submitted to substantiate the proposed use of any alternative. If it is determined that the evidence presented is satisfactory proof of performance for the use intended, the fire official shall approve the use of such alternative subject to the requirements of this code. The fire official may require and consider a statement from a professional engineer, architect or other competent person as to the equivalency of the proposed modification.

H. 106.5.2 Decision. The application for modification and the final decision of the fire official shall be in writing and

shall be recorded in the permanent records of the local enforcing agency.

- I. 106.6 Notices and orders. The fire official shall issue all necessary notices or orders to ensure compliance with the SFPC.
- J. 106.7 Department records. The fire official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records or disposed of in accordance with General Schedule Number Ten Seventeen available from The Library of Virginia.

# 13VAC5-51-91. Section 109 Inspection.

A. 109.1 Inspection. The fire official may inspect all structures and premises for the purposes of ascertaining and causing to be corrected any conditions liable to cause fire, contribute to the spread of fire, interfere with firefighting operations, endanger life, or any violations of the provisions or intent of the SFPC.

Exception: Single family dwellings and dwelling units in two family and multiple family dwellings and farm structures shall be exempt from routine inspections. This exemption shall not preclude the fire official from conducting routine inspections in Group R-3 or Group R-5 occupancies operating as a commercial bed and breakfast as outlined in Section 310.3 310.2 of the USBC or inspecting under § 27-98.2 of the Code of Virginia for hazardous conditions relating to explosives, flammable and combustible conditions, and hazardous materials.

B. 109.1.1 Right to entry. The fire official may enter any structure or premises at any reasonable time to inspect subject to constitutional restrictions on unreasonable searches and seizures. If entry is refused or not obtained, the fire official may pursue recourse as provided by law.

Note: Specific authorization and procedures for inspections and issuing warrants are set out in §§ 27-98.1 through 27-98.5 of the Code of Virginia and shall be taken into consideration.

- C. 109.1.2 Credentials. The fire official and technical assistants shall carry proper credentials of office when inspecting in the performance of their duties under the SFPC.
- D. 109.2 Coordinated inspections. The fire official shall coordinate inspections and administrative orders with any other state and local agencies having related inspection authority, and shall coordinate those inspections required by the USBC for new construction when involving provisions of the amended IFC<sub>7</sub> so that the owners and occupants will not be subjected to numerous inspections or conflicting orders.

Note: The USBC requires the building official to coordinate such inspections with the fire official.

E. 109.3 Other inspections. In accordance with § 9.1-207 of the Code of Virginia, the State Fire Marshal, upon presenting proper credentials, shall make annual inspections for hazards incident to fire in all (i) residential care facilities operated by any state agency, (ii) assisted living facilities licensed or subject to licensure pursuant to Chapter 18 (§ 63.2-1800 et seq.) of Title 63.2 of the Code of Virginia which are not inspected by a local fire marshal, (iii) student-residence facilities owned or operated by the public institutions of higher education in the Commonwealth, and (iv) public schools in the Commonwealth which are not inspected by a local fire marshal. In the event that any such facility or residence is found to be nonconforming to the SFPC, the State Fire Marshal or local fire marshal may petition any court of competent jurisdiction for the issuance of an injunction.

#### 13VAC5-51-130. IFC Section 202 Definitions.

A. Add the following definitions to read:

Applicable building code. The local or statewide building code and referenced standards in effect at the time the building or portion thereof was constructed, altered, renovated, or underwent a change of occupancy. See Section 103 for the application of the code.

Background clearance card or BCC. An identification card issued to an individual who is not a certified blaster or pyrotechnician and is responsible management or an employee of a company, corporation, firm, or other entity, solely for the purpose of submitting an application to the fire official for a permit to manufacture, use, handle, store, or sell explosive materials; or conduct a fireworks display. A person to whom a BCC has been issued can fulfill the role of a designated individual on an application for a permit to manufacture, use, handle, store, or sell explosive materials; or on an application for a permit to design, setup, and conduct a fireworks display.

Blaster, restricted. Any person engaging in the use of explosives or blasting agents utilizing five pounds (2.25 kg) or less per blasting operation and using instantaneous detonators. A certified restricted blaster can fulfill the role of a designated individual on an application for permit to manufacture, use, handle, store, or sell explosive materials.

Blaster, unrestricted. Any person engaging in the use of explosives or blasting agents without the limit to the amount of explosives or blasting agents or type of detonator. A certified unrestricted blaster can fulfill the role of a designated individual on an application for permit to manufacture, use, handle, store, or sell explosive materials.

Chemical fume hood. A ventilated enclosure designed to contain and exhaust fumes, gases, vapors, mists, and particulate matter generated within the hood.

Corrosive. A chemical that causes visible destruction of or irreversible alterations in living tissue by chemical action at the point of contact. A chemical shall be considered corrosive if when tested on the intact skin of albino rabbits by the method described in DOTn 49 CFR 173.137, such chemical destroys or changes irreversibly the structure of the tissue at the point of contact following an exposure period of four hours. This term does not refer to action on inanimate surfaces. A substance shall be considered corrosive if it has a pH less than or equal to 2.0 or a pH greater than or equal to 12.5 on a pH scale of 0-14.

Design. For the purposes of a fireworks display, either inside a building or structure or outdoors, it shall mean the pyrotechnician who will be in attendance and makes the final artistic determination for the placement of fireworks and ground display pieces suitable for the display site.

Designated individual. A person who is in possession of a BCC issued by the SFMO, certified by the SFMO as a pyrotechnician, or a restricted or unrestricted blaster, any of whom are responsible for ensuring compliance with state law and regulations relating to blasting agents and explosives and applying for explosives or firework permits; is at least 21 years of age; and demonstrates the capability to effectively communicate safety messages verbally and in writing in the English language.

DHCD. The Virginia Department of Housing and Community Development.

Emergency supplemental hardware. Any approved hardware used only for emergency events or drills to keep intruders from entering the room during an active shooter or hostile threat event or drill.

Explosive manufacturing. Mixing, blending, extruding, assembling articles, disassembling, chemical synthesis, and other functions involved in making a product or device that is intended to explode.

Laboratory suite. A fire rated enclosed laboratory area that will provide one or more laboratory spaces, within a Group B educational occupancy, that are permitted to include ancillary uses such as offices, bathrooms, and corridors that are contiguous with the laboratory area and are constructed in accordance with Section 430.3 of the USBC, Part I. Construction.

LBFPCA. Local Board of Fire Prevention Code Appeals.

Local government, local governing body or locality. The governing body of any county, city, or town, other political subdivision and state agency in this Commonwealth charged with the enforcement of the SFPC under state law.

Maintained. To keep unimpaired in an appropriate condition, operation, and continuance as installed in accordance with the applicable building code, or as

previously approved, and in accordance with the applicable operational and maintenance provisions of this code.

Mobile food preparation vehicles. Vehicles and enclosed trailers able to be occupied by persons during cooking operations that contain cooking equipment that utilize open flames or produce smoke or grease laden vapors for the purpose of preparing and serving food to the public. Vehicles used for private recreation shall not be considered mobile food preparation vehicles.

Night club. Any building or portion thereof in which the main use is a place of public assembly that provides exhibition, performance, or other forms of entertainment; serves alcoholic beverages; and provides music and space for dancing.

Permissible fireworks. Any sparklers, fountains, Pharaoh's serpents, caps for pistols, or pinwheels commonly known as whirligigs or spinning jennies that do not emit sparks or other burning effects to a distance greater than five meters (16.4 feet); wheels that do not emit a flame radius greater than one meter (39 inches); crackling devices and flashers or strobes that do not emit sparks or other burning effects to a distance greater than two meters (78.74 inches); and sparkling devices or other fireworks devices that (i) do not explode or produce a report, (ii) do not travel horizontally or vertically under their own power, (iii) do not emit or function as a projectile, (iv) do not produce a continuous flame longer than 20 inches, (v) are not capable of being reloaded, and (vi) if designed to be ignited by a fuse, have a fuse that is protected to resist side ignition and a burning time of not less than four seconds and not more than eight seconds.

Pyrotechnician (firework operator). Any person supervising or engaged in the design, setup, or conducting of any fireworks display, either inside a building or outdoors. A certified pyrotechnician can fulfill the role of a designated individual on an application for a permit for a fireworks display.

Pyrotechnician, aerial. A person supervising or engaged in the design, setup, or conducting of an outdoor aerial fireworks display performed in accordance with the regulations as set forth in this code and NFPA 1123, a referenced standard for fireworks displays.

Pyrotechnician, proximate. A person supervising or engaged in the design, setup, or conducting of a fireworks display, either inside a building or outdoors, performed in accordance with the regulations as set forth in this code and NFPA 1126, a referenced standard for the use of pyrotechnics before a proximate audience.

Reactive target. A target designator intended to be shot at with a firearm and is purchased or obtained through a commercial or retail outlet, is comprised of two or more components in presized quantities of 1 pound (0.453592)

kg) or less that are advertised and sold together with instructions on how to combine the components or create a target that explodes upon impact. Also known as exploding targets.

Responsible management. A person who is any of the following:

- 1. The sole proprietor of a sole proprietorship.
- 2. The partners of a general partnership.
- 3. The managing partners of a limited partnership.
- 4. The officers or directors of a corporation.
- 5. The managers or members of a limited liability company.
- 6. The managers, officers, or directors of an association.
- 7. Individuals in other business entities recognized under the laws of the Commonwealth as having a fiduciary responsibility to the firm.

Restricted explosives manufacturing. When an individual is engaged in the incidental manufacture or production of explosive materials composed of commercially available components that are packaged or marketed for the purpose of producing explosive materials, including reactive targets, at a location not within the definition of unrestricted explosives manufacture; is for immediate use at the site of incidental explosives manufacturing or production without residual storage; and does not involve or include the bulk mixing and delivery vehicles that are within the scope of NFPA 495.

Sole proprietor. A person or individual, not a corporation, who is trading under his own name or under an assumed or fictitious name pursuant to the provisions of §§ 59.1-69 through 59.1-76 of the Code of Virginia.

Special expert. An individual who has demonstrated qualifications in a specific area, outside the practice of architecture or engineering, through education, training, and experience.

State Fire Marshal. The State Fire Marshal as provided for by § 9.1-206 of the Code of Virginia.

State Regulated Care Facility (SRCF). A building with an occupancy in Group R-2, R-3, R-4, or R-5 occupied by persons in the care of others where program oversight is provided by the Virginia Department of Social Services, the Virginia Department of Behavioral Health and Developmental Services, the Virginia Department of Education, or the Virginia Department of Juvenile Justice.

State Review Board. The Virginia State Building Code Technical Review Board as established under § 36-108 of the Code of Virginia.

Teaching and research laboratory. A building or portion of a building where hazardous materials are stored, used, and handled for the purpose of testing, analysis, teaching, research, or developmental activities on a nonproduction basis rather than in a manufacturing process.

Technical Assistant. Any person employed by or under an extended contract to a local enforcing agency for enforcing the SFPC. For the purposes of this definition, an extended contract shall be a contract with an aggregate term of 18 months or longer.

Unrestricted explosives manufacturing. When any company, person, or group of persons is engaged in the business of manufacturing or producing explosive materials at a fixed site or facility for the purpose of commercial sale, use, or distribution of explosives.

USBC. The Virginia Uniform Statewide Building Code (13VAC5-63).

B. Add the following definition under the term "Occupancy Classification Residential Group R" to read:

Residential Group R 5. Detached one and two family dwellings and multiple single family dwellings (townhouses) not more than three stories high with separate means of egress and their accessory structures. The terms "R 5" and "one and two family dwelling" where used in this code shall be interchangeable.

C. B. Change the following definitions to read:

Approved. Acceptable to the authority having jurisdiction.

Automatic fire-extinguishing system. An approved system of devices and equipment that automatically detects a fire and discharges an approved fire-extinguishing agent onto or in the area of a fire. Such system shall include an automatic sprinkler system, unless otherwise expressly stated.

Change of occupancy. Either of the following shall be considered a change of occupancy where the current VCC requires a greater degree of accessibility, structural strength, fire protection, means of egress, ventilation, or sanitation than that which is existing in the current building or structure:

- 1. Any change in the occupancy classification of a building or structure.
- 2. Any change in the purpose of, or change in the level of activity within, a building or structure.

Note: The use and occupancy classification of a building or structure shall be determined in accordance with Chapter 3 of the VCC.

Fire code official. The officer or other designated authority charged with administration and enforcement of this code, or a duly authorized representative. For the purpose of this code, the terms "code official" and "fire official" shall have the same meaning as the term "fire code official" and, in addition, such official shall have the powers outlined in § 27-98.1 of the Code of Virginia.

Fireworks. Any firecracker, torpedo, skyrocket, or other substance or object, of whatever form or construction, that contains any explosive or inflammable compound or substance and is intended, or commonly known, as fireworks and that explodes, rises into the air or travels laterally, or fires projectiles into the air. Fireworks shall not include automobile flares, paper caps containing not more than the average of 0.25 grain (16 mg) of explosive content per cap or toy pistols, toy canes, toy guns, or other devices utilizing such caps and items commonly known as party poppers, pop rocks, and snap-n-pops. Fireworks may be further delineated and referred to as:

Fireworks, 1.4G (formerly known as Class C, Common Fireworks). Small fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects by combustion. Such 1.4G fireworks that comply with the construction, chemical composition, and labeling regulations of the U.S. Department of Transportation DOTn for Fireworks, UN0336, and the U.S. Consumer Product Safety Commission as set forth in CPSC 16 CFR Parts 1500 and 1507, are not explosive materials for the purpose of this code.

Fireworks, 1.3G (formerly Class B, Special Fireworks). Large fireworks devices, which are explosive materials, intended for the use in fireworks displays and designed to produce audible or visible effects by combustion, deflagration, or detonation. Such 1.3G fireworks include, but are not limited to, firecrackers containing more than 130 milligrams (2 grains) of explosive composition, aerial shells containing more than 40 grams of pyrotechnic composition, and other display pieces that exceed the limits for classification as 1.4G fireworks. Such 1.3G fireworks are also described as Fireworks, UN0335 by the DOTn.

Laboratory suite. A fire-rated enclosed laboratory area that will provide one or more laboratory spaces within a Group B educational occupancy that are permitted to include ancillary uses such as offices, bathrooms, and corridors that are contiguous with the laboratory area and are constructed in accordance with Section 430.3 of the USBC, Part I, Construction (13VAC5-63-220 L).

Mobile food preparation vehicles. Vehicles and enclosed trailers able to be occupied by persons during cooking operations that contain cooking equipment that utilize open flames or produce smoke or grease laden vapors for the purpose of preparing and serving food to the public. Vehicles used for private recreation shall not be considered mobile food preparation vehicles.

Occupancy classification. For the purposes of this code, occupancies are defined in accordance with the applicable building code.

Smokeless propellants. Solid propellants, commonly referred to as smokeless powders or any propellant classified by DOTn as a smokeless propellant in accordance with NA3178, Smokeless Powder for Small Arms, used in small arms ammunition, firearms, cannons, rockets, propellant-actuated devices, and similar articles.

## 13VAC5-51-131. IFC Chapter 3 General Requirements.

A. The following changes shall be made to Section 301, General:

1. Change Section 301.2 to read:

301.2 Permits. Permits shall be required as set forth in Section 107.2 for the activities or uses regulated by Sections 306, 307, 308, and 315.

2. Add Section 301.3 to read:

301.3 Occupancy. The occupancy of a structure shall be continued as originally permitted under and in full compliance with the codes in force at the time of construction or alteration. The occupancy of a structure shall not change to another occupancy that will subject the structure to any special provisions of this code or the applicable building code without the approval of the building official. Where a certificate of occupancy is not available for a building, the owner or owner's agent may request that one be issued by the building official and retained on site for reference.

B. The following changes shall be made to Section 302, Definitions:

Change Section 302.1 to read:

302.1 Definitions. The following terms are defined in Chapter 2:

Bonfire.

Explosive manufacturing.

Hi-boy

High-voltage transmission line.

Mobile food preparation vehicles.

Open burning.

Portable outdoor fireplace.

Powered industrial truck.

Reactive targets.

Recreational fire.

Restricted explosives manufacturing.

Sky lantern.

Unrestricted explosives manufacturing.

- C. The following changes shall be made to Section 304, Combustible Waste Material:
  - 1. Change Section 304.1.2 to read:

(N)304.1.2 304.1.2 Vegetation. Weeds, grass, vines, or other growth that is capable of being ignited and endangering property shall be cut down and removed by the owner or occupant of the premises.

2. Change Section 304.1.3 to read:

(N)304.1.3 304.1.3 Space underneath seats. Spaces underneath grandstand and bleacher seats shall be kept free from combustible and flammable materials unless approved by the applicable building code.

3. Change Section 304.3.2 to read:

304.3.2 Capacity exceeding 5.88 cubic feet. Containers with a capacity exceeding 5.88 cubic feet (44 gallons) (0.17 m³) shall be provided with lids. Containers and lids shall be constructed of noncombustible materials or approved combustible materials.

4. Change Section 304.3.3 to read:

304.3.3 Capacity exceeding 1.5 cubic yards. Dumpsters and containers with an individual capacity of 1.5 cubic yards (40.5 cubic feet (1.15 m³)) or more shall not be stored in buildings or placed within 5 feet (1524 mm) of combustible walls, openings or combustible roof eave lines.

#### **Exceptions:**

- 1. Dumpsters or containers in areas protected by an approved automatic sprinkler system installed throughout in accordance with the applicable building code NFPA 13 standard.
- 2. Storage in a structure shall not be prohibited where the structure is of Type I or IIA construction, located not less than 10 feet (3048 mm) from other buildings, and used exclusively for dumpster or container storage.
- 5. Change Section 304.3.4 to read:

304.3.4 Capacity of 1.0 cubic yard or more. Dumpsters with an individual capacity of 1.0 cubic yard 200 gallons (0.76 m³) or more shall not be stored in buildings or placed within 5 feet (1524 mm) of combustible walls, openings or combustible roof eave lines unless the dumpsters are constructed of noncombustible materials or of combustible materials with a peak rate of heat release not exceeding 300 kW/m² where tested in accordance with ASTM E 1354 at an incident heat flux of 50 kW/m² in the horizontal orientation.

# Exceptions:

- 1. Dumpsters in areas protected by an approved automatic sprinkler system installed throughout in accordance with the applicable building code NFPA 13 standard.
- 2. Storage in a structure shall not be prohibited where the structure is of Type I or IIA construction, located not less than 10 feet (3048 mm) from other buildings, and used exclusively for dumpster or container storage.
- D. The following change shall be made to Section 306, Motion Picture Projection Rooms and Film:

Change Section 306.1 to read:

- 306.1 Motion picture projection rooms. Electric arc, xenon, or other light source projection equipment that develops hazardous gases, dust, or radiation and the projection of ribbon-type cellulose nitrate film, regardless of the light source used in projection, shall be operated within a motion picture projection room complying with the applicable building code.
- E. The following changes shall be made to Section 307, Open Burning, Recreational Fires and Portable Outdoor Fireplaces:
  - 1. Add an exception to Section 307.1 to read:

Exception: Approved outdoor live fire training using equipment or appliances accessible or available to the general public, and that complies with Section 307.4.

2. Change Section 307.2 to read:

307.2 Permit required.A permit shall be obtained from the fire code official in accordance with Section 107.2 prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention or control of disease or pests, or a bonfire. Application for such approval shall only be presented by and permits issued to the owner of the land upon which the fire is to be kindled.

- F. The following changes shall be made to Section 308, Open Flames:
  - 1. Change Section 308.2 to read:
    - 308.2 Permits required. Permits shall be obtained from the fire code official in accordance with Section 107.2 prior to engaging in the following activities involving open flame, fire, and burning:
    - 1. Use of a torch or flame-producing device to remove paint from a structure.
    - 2. Use of open flame, fire, or burning in connection with Group A or E occupancies.

- 3. Use or operation of torches and other devices, machines, or processes liable to start or cause fire in or upon wildfire risk areas.
- 2. Change Section 308.3 to read:
  - 308.3 Group A occupancies. Open-flame devices shall not be used in a Group A occupancy.

#### **Exceptions:**

- 1. Open-flame devices are allowed to be used in the following situations, provided approved precautions are taken to prevent ignition of a combustible material or injury to occupants:
- 1.1. Where necessary for ceremonial or religious purposes in accordance with Section 308.1.7.
- 1.2. On stages and platforms as a necessary part of a performance in accordance with Section 308.3.2.
- 1.3. Where candles on tables are securely supported on substantial noncombustible bases and the candle flames are protected.
- 2. Heat-producing equipment complying with Chapter 6 and the applicable building code.
- 3. Gas lights are allowed to be used provided adequate precautions satisfactory to the fire code official are taken to prevent ignition of combustible materials.
- G. The following changes shall be made to Section 311, Vacant Premises:
  - 1. Change Section 311.1 to read:
    - 311.1 General. Temporarily unoccupied buildings, structures, premises, or portions thereof, including tenant spaces, shall be safeguarded and maintained in accordance with Sections 311.1.1 through 311.6.
  - 2. 1. Change Section 311.1.1 to read:
    - 311.1.1 Abandoned premises. Buildings, structures, and premises for which an owner cannot be identified or located by dispatch of a certificate of mailing to the last known or registered address, which persistently or repeatedly become unprotected or unsecured, which have been occupied by unauthorized persons or for illegal purposes, or which present a danger of structural collapse or fire spread to adjacent properties shall be considered abandoned and unsafe until declared abated in accordance with the Virginia Maintenance Code or the applicable building code.
  - 3. 2. Change Section 311.2.3 to read:
    - 311.2.3 Fire separation. Fire-resistance-rated partitions, fire barriers, and fire walls separating vacant tenant spaces from the remainder of the building shall be maintained. Protection of openings, joints, and

penetrations in fire-resistance-rated assemblies shall be maintained in accordance with Chapter 7.

- 4. 3. Change Section 311.3 to read:
  - 311.3 Removal of combustibles. Persons owning, or in charge or control of, a vacant building or portion thereof shall remove therefrom all accumulations of combustible materials, flammable or combustible waste, or rubbish and shall securely lock or otherwise secure doors, windows, and other openings to prevent entry by unauthorized persons. The premises shall be maintained clear of waste or hazardous materials.

# **Exceptions:**

- 1. Buildings or portions of buildings undergoing additions, alterations, repairs, or change of occupancy in accordance with the applicable building code where waste is controlled and removed as required by Section 304.
- 2. Seasonally occupied buildings.
- 5. 4. Add Section 311.5.6 to read:
  - 311.5.6 Removal. Removal of placards posted in accordance with this section without the approval of the fire official shall be a violation of this code.
- 6. 5. Change Section 311.6 to read:
  - (N)311.6 <u>311.6</u> Unoccupied tenant spaces in mall buildings. Unoccupied tenant spaces in covered and open mall buildings shall be:
  - 1. Kept free from the storage of any materials.
  - 2. Without doors or other access openings other than one door that shall be kept key locked in the closed position except during that time when opened for inspection.
  - 3. Kept free from combustible waste and be broom swept clean.
- H. The following changes shall be made to Section 313, Fueled Equipment:

Change Section 313.1 to read:

313.1 General. Fueled equipment including motorcycles, mopeds, lawn-care equipment, portable generators, and portable cooking equipment shall not be stored, operated, or repaired within a building.

# **Exceptions:**

- 1. Buildings or rooms constructed for such use in accordance with the applicable building code.
- 2. Where allowed by Section 314.
- 3. Storage of equipment utilized for maintenance purposes is allowed in approved locations where the aggregate fuel capacity of the stored equipment does not

exceed 10 gallons (38 L) and the building is protected throughout by an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard.

- I. The following changes shall be made to Section 314, Indoor Displays:
  - 1. Change Section 314.1 to read:
    - 314.1 General. Indoor displays constructed within any building or structure shall comply with Sections 314.2 through 314.5.
  - 2. Add Section 314.5 to read:
    - 314.5 Smokeless powder and small arms primers. Venders shall not store, display, or sell smokeless powder or small arms primers during trade shows inside exhibition halls except as follows:
    - 1. The amount of smokeless powder displayed by each vender is limited to the amount established in Section 5606.5.1.1.
    - 2. The amount of smokeless powder each vender may store is limited to the storage arrangements and storage amounts established in Section 5606.5.2.1. Smokeless powder shall remain in the manufacturer's original sealed container, and the container shall remain sealed while inside the building. The repackaging of smokeless powder shall not be performed inside the building. Damaged containers shall not be repackaged inside the building and shall be immediately removed from the building in such manner to avoid spilling any powder.
    - 3. There shall be at least 50 feet separation between venders and 20 feet from any exit.
    - 4. Small arms primers shall be displayed and stored in the manufacturer's original packaging and in accordance with the requirements of Section 5606.5.2.3.
- J. The following changes shall be made to Section 315, General Storage:
  - 1. Change Section 315.2 to read:
    - 315.2 Permit required. A permit for miscellaneous combustible storage shall be required as set forth in Section 107.2.
  - 2. Change Section Exception 2 of Section 315.3.1 and Section 315.3.4 to read:
    - 2. The 18-inch (457 mm) ceiling clearance is not required for storage along walls in areas of buildings equipped with an automatic sprinkler system in accordance with the applicable NFPA 13 standard.
    - (N)315.3.4 315.3.4 Attic, under-floor, and concealed spaces. Attic, under-floor, and concealed spaces shall not be used for storage of combustible materials unless

approved or not prohibited by the applicable building code.

# 3. Change Section 315.4 to read:

315.4 Outside storage. Outside storage of combustible materials shall not be located within 10 feet (3048 mm) of a property line or other building on the site.

#### **Exceptions:**

- 1. The separation distance is allowed to be reduced to 3 feet (914 mm) for storage not exceeding 6 feet (1829 mm) in height.
- 2. The separation distance is allowed to be reduced when the fire official determines that no hazard to the adjoining property exists.
- 4. Change Section 315.4.1 to read:
- 315.4.1 Storage beneath overhead projections from buildings. To the extent required by the code the building was constructed under, when buildings are required to be protected by automatic sprinklers, the outdoor storage, display, and handling of combustible materials under eaves, canopies, or other projections or overhangs is prohibited except where automatic sprinklers are installed under such eaves, canopies, or other projections or overhangs.
- 5. Change Section 315.6 to read:
  - (N)315.6 315.6 Storage in plenums. Storage shall not be permitted in plenums unless approved for such use by the applicable building code. Abandoned material in plenums shall be deemed to be storage and shall be removed. Where located in plenums, the accessible portion of abandoned cables that are not identified for future use with a tag shall be deemed storage and shall be removed.
- K. The following changes shall be made to Section 316, Hazards to Fire Fighters:

Change Section 316.6.1 Sections 316.6 through 316.6.2 to read:

- 316.6 Structures and outdoor storage underneath high-voltage transmission lines, bridges, and elevated roadways. Structures and outdoor storage underneath high-voltage transmission lines, bridges, and elevated roadways shall comply with Sections 316.6.1 and 316.6.2, respectively.
- (N)316.6.1 316.6.1 Structures. Structures shall not be constructed within the utility easement beneath high-voltage transmission lines or underneath bridges or elevated roadways unless approved.
- 316.6.2 Outdoor storage. Outdoor storage within the utility easement underneath high-voltage transmission lines or underneath bridges or elevated roadways shall be

<u>limited to noncombustible materials. Storage of hazardous materials, including flammable and combustible liquids, is prohibited.</u>

Exception: Combustible storage, including vehicles and fuel storage for backup power equipment serving public utility equipment or for the construction, repair, or maintenance operations of bridges or elevated roadways, is allowed provided that a plan indicating the storage configuration is submitted and approved.

- L. The following changes shall be made to Section 317, Rooftop Gardens and Landscaped Roofs:
  - 1. Change Section 317.1 to read:

(N)317.1 317.1 General. Rooftop gardens and landscaped roofs shall be maintained in accordance with Sections 317.2 through 317.5.

2. Change Section 317.2 to read:

(N)317.2 317.2 Rooftop garden or landscaped roof size. Rooftop garden or landscaped roof areas shall not exceed the size approved in accordance with the applicable building code.

3. Change Section 317.3 to read:

(N)317.3 317.3 Rooftop structure and equipment clearance. Required structure and equipment clearances shall be maintained as provided by the applicable building code.

4. Change Section 317.4 to read:

317.4 Vegetation. Vegetation shall be maintained in accordance with Sections 317.4.1 and 317.4.2.

M. The following changes change shall be made to Section 318, Laundry Carts:

Change Section 318.1 to read:

318.1 Laundry carts with a capacity of 1 cubic yard or more. Laundry carts with an individual capacity of 1 cubic yard (200 gallons (0.76  $\,\mathrm{m}^3$ )) or more used in laundries within Groups B, E, F-1, I, M and R-1 occupancies shall be constructed of noncombustible materials or materials having a peak rate of heat release not exceeding 300 kW/m² at a flux of 50 kW/m² where tested in a horizontal orientation in accordance with ASTM E 1354.

#### **Exceptions:**

- 1. Laundry carts in areas protected by an approved automatic sprinkler system throughout in accordance with the applicable NFPA 13 standard.
- 2. Laundry carts in coin-operated laundries.

- N. Add Change Section 319, Mobile Food Preparation Vehicles. Add Sections 319.1 through 319.11, including subsections, to read:
  - 319.1 <u>General.</u> Mobile food preparation vehicles that are equipped with appliances that utilize open flames or produce smoke or grease laden vapors shall comply with this section.
  - 319.2 Permit required. Permits shall be required as set forth in Section 107.2.
  - 319.3 Seating. Seating for the public within any mobile food preparation vehicles is prohibited.
  - 319.4 Exhaust hood. Cooking equipment that produces grease laden vapors shall be provided with a kitchen exhaust hood in accordance with NFPA 96, Annex B.
  - 319.5 Fire protection. Fire protection shall be provided in accordance with Sections 319.5.1 through 319.5.2.
  - 319.5.1 Fire protection for cooking equipment. Cooking equipment shall be protected by automatic fire extinguishing systems in accordance with Section 904.3.
  - 319.5.2 Fire extinguisher. Portable fire extinguishers shall be provided in accordance with Section 904.12.5 906.4.
  - 319.6 Appliance connection to fuel supply. Gas cooking appliances shall be secured in place and connected to fuel supply piping with an appliance connector complying with ANSI Z21.69/CSA 6.16. The connector installation shall be configured in accordance with manufacturer's installation instructions. Movement of appliances shall be limited by restraining devices installed in accordance with the connector and appliance manufacturer's instructions.
  - 319.6.1 Construction and modifications. Following initial construction and any modifications of the fuel system, the system, including hoses, shall be proven free of leaks by performing a pressure test in accordance with NFPA 58 at not less than the normal operating pressure.
  - 319.6.2 Leak detection. Gas systems shall be inspected prior to each use and following fuel tank replacement or refill in one of the following methods:
  - 1. A water and soap solution shall be applied to every accessible connection or connection manipulated during the replacement or fueling and observed for evidence of gas leakage.
  - 2. Pressure testing in accordance with Annex L of NFPA 58.
  - 319.6.3 Leaks. When leaks are discovered during inspections and testing, the fuel supply shall be secured in the "off" position or disconnected from the appliance,

- and the appliance shall not be operated until serviced by a qualified person.
- 319.7 Cooking oil storage containers. Cooking oil storage containers within mobile food preparation vehicles shall have a minimum aggregate area volume not to exceed 120 gallons (454L) (454 L) and shall be stored in such a way as to not be toppled or damaged during transport.
- 319.8 Cooking oil storage tanks. Cooking oil storage tanks within mobile food preparation vehicles shall comply with Sections 319.8.1 through 319.8.5.
- 319.8.1 Metallic storage tanks. Metallic cooking oil storage tanks shall be listed in accordance with UL 142 or UL 80, and shall be installed in accordance with the tank manufacturer's instructions.
- 319.8.2 Nonmetallic tanks. Nonmetallic cooking oil storage tanks shall be installed in accordance with the tank manufacturer's instructions and shall also comply with all of the following:
- 1. Tanks shall be listed for use with cooking oil, including maximum temperature to which the tanks will be exposed to during use.
- 2. Tank capacity shall not exceed 200 gallons (757 L) per tank.
- 319.8.3 Cooking oil storage system components. Metallic and nonmetallic cooking oil storage system components shall include piping, connections, fittings, valves, tubing, hose, pumps, vents, and other related components used for the transfer of cooking oil.
- 319.8.4 Design criteria. The design, fabrication, and assembly of system components shall be suitable for the working pressures, temperatures, and structural stresses to be encountered by the components.
- 319.8.5 Tank venting. Normal and emergency venting shall be provided for cooking oil storage tanks.
- 319.8.5.1 Normal vents. Normal vents shall be located above the maximum normal liquid line and shall have a minimum effective area not smaller than the largest filling or withdrawal connection. Normal vents are not required to vent to the exterior.
- 319.8.5.2 Emergency vents. Emergency relief vents shall be located above the maximum normal liquid line and shall be in the form of a device that will relieve excessive internal pressure caused by an exposure fire. For nonmetallic tanks, the emergency relief vent shall be allowed to be in the form of construction. Emergency vents are not required to discharge to the exterior.
- 319.9 Liquefied petroleum gas (LP-gas) systems. Where LP-gas systems provide fuel for cooking appliances, such

- systems shall comply with NFPA 58, Chapter 61 and Sections 319.9.1 through 319.9.5.
- 319.9.1 Maximum aggregate volume. The maximum aggregate capacity of LP-gas containers transported on the vehicle and used to fuel cooking appliances only shall not exceed 200 pounds propane capacity.
- 319.9.2 Protection of container. LP-gas containers installed on the vehicle shall be securely mounted and restrained to prevent movement.
- 319.9.3 LP-gas container construction. LP-gas containers shall be manufactured in compliance with the requirements of NPFA 58.
- 319.9.4 Protection of system piping. LP-gas system piping, including valves and fittings, shall be adequately protected to prevent tampering, impact damage, and damage from vibration.
- 319.9.5 LP-gas alarms. A listed LP-gas alarm shall be installed with the vehicle in the vicinity of LP-gas system components, in accordance with manufacturer's instructions.
- 319.10 Compressed natural gas (CNG) systems. Where CNG systems provide fuel for cooking appliances, such systems shall comply with Sections 319.10.1 through 319.10.4.
- 319.10.1 CNG containers supplying only cooking fuel. CNG containers installed solely to provide fuel for cooking purposes shall be in accordance with Sections 319.10.1.1 through 319.10.1.3.
- 319.10.1.1 Maximum aggregate volume. The maximum aggregate capacity of CNG containers transported on the vehicle shall not exceed 1,300 pounds water capacity.
- 319.10.1.2 Protection of container. CNG containers shall be securely mounted and restrained to prevent movement. Containers shall not be installed in locations subject to direct vehicle impact.
- 319.10.1.3 CNG container construction. The construction of CNG containers shall be approved.
- 319.10.2 CNG containers supplying transportation and cooking fuel. Where CNG containers and systems are used to supply fuel for cooking purposes in addition to being used for transportation fuel, the installation shall be in accordance with NFPA 52.
- 319.10.3 Protection of system piping. CNG system piping, including valves and fittings, shall be adequately protected to prevent tampering, impact damage, and damage from vibration.
- 319.10.4 Methane alarms. A listed methane gas alarm shall be installed within the vehicle in accordance with manufacturer's instructions.

319.11 Maintenance. Maintenance of systems on mobile food preparation vehicles shall be in accordance with Sections 319.11.1 through 319.11.3.

319.11.1 Exhaust system. The exhaust system, including hood, grease-removal devices, fans, ducts and other appurtenances, shall be inspected and cleaned in accordance with Chapter 6.

319.11.2 Fire protection systems and devices. Fire protection systems and devices shall be maintained in accordance with Chapter 9.

319.11.3 Fuel-gas systems. LP-gas containers installed on the vehicle and fuel-gas piping systems shall be inspected annually by an approved inspection agency or a company that is registered with the U.S. Department of Transportation to requalify LP-gas cylinders to ensure that system components are free of damage, suitable for the intended service, and not subject to leaking. CNG containers shall be inspected every three years in a qualified service facility. CNG containers shall not be used past their expiration dates listed on the manufacturer's container label. Upon satisfactory inspection, the approved inspection agency shall affix a tag on the fuel-gas system or within the vehicle indicating the name of the inspection agency and the date of satisfactory inspection.

# 13VAC5-51-132. IFC Chapter 4 Emergency Planning and Preparedness.

A. The following change shall be made to Section 401, General:

Add Section 401.1.1 to read:

401.1.1 State Regulated Care Facilities. When a state license is required by the Virginia Department of Social Services; Virginia Department of Behavioral Health and Developmental Services; Virginia Department of Education; or Virginia Department of Juvenile Justice to operate, SRCF shall comply with this section and the provisions of Section 404.

B. The following changes shall be made to Section 403, Emergency Preparedness Requirements:

## 1. Add Section 403.1.1 to read:

403.1.1 Maintaining occupant load posting. Occupant load postings required by the building code are required to be maintained.

2. Add Sections 403.2.2.1, 403.2.2.1.1, and 403.2.2.1.2 to read:

403.2.2.1 Night clubs. Night clubs shall comply with Sections 403.2.2.1.1 and 403.2.2.1.2.

403.2.2.1.1 Audible announcements. Audible announcements shall be made to the occupants no longer than 10 minutes prior to the start of the entertainment and

at each intermission to notify the occupants of the location of the exits to be used in the event of a fire or other emergency.

403.2.2.1.2 Occupant load count. Upon request of the fire code official, the owner or operator, or both, will be required to keep a running count of the occupant load to provide to the fire code official during performance hours of operation, entertainment hours of operation, or both.

# 3. Change Section 403.8.3.2 to read:

403.8.3.2 Employee staffing. Group I-3 occupancies shall be provided with 24-hour staffing. An employee shall be within three floors or 300 feet (91–440 (91,440 mm) horizontal distance of the access door of each resident housing area. In Group I-3 Conditions 3, 4, and 5, as defined in Chapter 2, the arrangement shall be such that the employee involved can start release of locks necessary for emergency evacuation or rescue and initiate other necessary emergency actions within 2 minutes of an alarm.

Exception: An employee shall not be required to be within three floors or 300 feet (91 440 (91,440 mm) horizontal distance of the access door of each resident housing area in areas in which all locks are unlocked remotely and automatically in accordance with the applicable building code.

4. Change Section 403.10 to read:

403.10 Group R occupancies. Group R occupancies shall comply with Sections 403.10.1 through 403.10.4.

5. Add Section 403.10.4 to read:

403.10.4 Groups R-3 and R-5 lodging facilities. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Groups R-3 and R-5 bed and breakfast and other transient boarding facilities that are either proprietor or non-proprietor occupied.

6. Change Section 403.11 to read:

403.11 Special uses. Special uses shall be in accordance with Sections 403.11.1 through 403.11.5 403.11.6.

7. Change Section 403.11.1.4 to read:

403.11.1.4 Lease plan revisions. The lease plans shall be revised annually or as often as necessary to keep them current. Modifications or changes in tenants or occupancies shall not be made without prior approval of the fire code official.

8. Add Section 403.11.5 403.11.6 to read:

403.11.5 403.11.6 SRCF. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for SRCFs.

- C. The following ehange changes shall be made to Section 404, Fire Safety, Evacuation and Lockdown Plans:
  - 1. Change Item 4.4 of Section 404.2.3.1 to read:
    - 4.4. A description of how locking means and methods are in compliance with the requirements of the VCC and the applicable provisions of this code for egress and accessibility.
  - 2. Change Section 404.4.1 to read:
    - 404.4.1 Distribution. The fire safety and evacuation plans shall be distributed to the tenants and building service employees by the owner or owner's agent. Tenants shall distribute to their employees applicable parts of the fire safety plan affecting the employees' actions in the event of a fire or other emergency. Fire safety and evacuation plans shall be made available by the proprietor of Group Groups R-3 and R-5 bed and breakfast and other transient boarding facilities to transient guests upon their arrival or are present in each transient guest room.
- D. The following changes shall be made to Section 405, Emergency Evacuation Drills
  - 1. Change Section 405.1 to read:
    - 405.1 General. Emergency evacuation drills complying with Sections 405.2 through 405.9 shall be conducted at least annually where fire safety and evacuation plans are required by Section 403 or when required by the fire code official. Drills shall be designed in cooperation with the local authorities.

Exception: Emergency evacuation drills shall not be conducted in school buildings during periods of mandatory testing required by the Virginia Board of Education.

2. Add the following row to Table 405.2 to read:

Group or Occupancy	Frequency	Participation
SRCF	Monthly	All occupants

- 3. Add Section 405.2.1 to read:
  - 405.2.1 High-rise buildings. Fire exit drills shall be conducted annually by building staff personnel or the owner of the building in accordance with the fire safety plan and shall not affect other current occupants.
- <u>E. The following change shall be made to Section 406, Employee Training and Response Procedures:</u>

## Add Section 406.3.4.1 to read:

406.3.4.1 Emergency supplemental hardware training. Where a facility has installed approved emergency supplemental hardware, employees shall be trained on their assigned duties and procedures for the use of such

<u>device.</u> Records of in-service training shall be made available to the fire code official upon request.

# 13VAC5-51-133. IFC Chapter 5 Fire Service Features.

- A. The following changes shall be made to Section 501, General:
  - 1. Change Section 501.2 to read:
    - 501.2 Permits. A permit shall be required as set forth in Section 107.2.
  - 2. Delete Section 501.4.
- B. The following changes shall be made to Section 503, Fire Apparatus Access Roads:
  - 1. Add exceptions to Section 503.1 to read:

# Exceptions:

- 1. Fire apparatus access roads shall be permitted to be provided and maintained in accordance with written policy that establish fire apparatus access road requirements and such requirements shall be identified to the owner or his agent prior to the building official's approval of the building permit.
- 2. On construction and demolition sites fire apparatus access roads shall be permitted to be provided and maintained in accordance with Section 3310.1.
- 2. Change Section 503.1.1 to read:
- 503.1.1 Buildings and facilities. Approved fire apparatus access roads shall be provided for every facility, building, or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45,720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

# Exceptions:

- 1. The fire code official is authorized to increase the dimension of 150 feet (45,720 mm) where any of the following conditions occur:
- 1.1. The building is equipped throughout with an approved automatic sprinkler system in accordance with the applicable NFPA13, NFPA 13R, or NFPA13D standard.
- 1.2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades, or other similar conditions, and an approved alternative means of fire protection is provided.
- 1.3. There are not more than two Group R-3 or Group U occupancies.

- 2. Where approved by the fire code official, fire apparatus access roads shall be permitted to be exempted or modified for solar photovoltaic power generation facilities.
- 3. Add exception to Section 503.2.1 to read:

Exception: Fire apparatus access roads exclusively serving single family dwelling or townhouse developments that are fully sprinklered as provided for in Sections Section R313.1 or R313.2 of the International Residential Code shall have an unobstructed width of not less than 18 feet (5486 mm), exclusive of shoulders.

4. Add Section 503.7 to read:

503.7 Fire lanes for existing buildings. The fire code official is authorized to designate public and private fire lanes as deemed necessary for the efficient and effective operation of fire apparatus. Fire lanes shall comply with Sections 503.2 through 503.6.

- C. The following changes shall be made to Section 504, Access to Building Openings and Roofs:
  - 1. Change Section 504.1 to read:
    - 504.1 Required access. Exterior doors and openings required by the applicable building code shall be maintained readily accessible for emergency access by the fire department. An approved access walkway leading from fire apparatus access roads to exterior openings shall be provided when required by the fire code official.
  - 2. Change Section 504.3 to read:

(N)504.3 504.3 Stairway access to roof. Stairway access to the roof shall be maintained and marked at street and floor levels with a sign indicating that the stairway continues to the roof.

- D. The following changes shall be made to Section 507, Fire Protection Water Supplies:
  - 1. Add Section 507.3.1 to read:

507.3.1 Fire flow requirements for fully sprinklered residential developments. Notwithstanding Section 103.1.2, the fire flow requirements in Table B105.1(1) of Appendix B of the IFC shall be permitted to be used for determining fire flow in single family dwelling and townhouse developments which are fully sprinklered as provided for in Sections Section R313.1 or R313.2 of the International Residential Code.

2. Change Section 507.5.1 to read:

507.5.1 Where required. Fire hydrant systems shall be located and installed as directed by the fire department. Fire hydrant systems shall conform to the written standards of the jurisdiction and the fire department.

**Exceptions:** 

- 1. For in-fill development of fewer than five detached single-family dwellings constructed in existing residential developments.
- 2. For the reconstruction or rehabilitation of detached single-family dwellings.
- 3. Add Section 507.5.1.2 to read:

507.5.1.2 Fire hydrant requirements for fully sprinklered residential developments. Notwithstanding Section 103.1.2, the number and distribution of fire hydrants in Table C102.1 of Appendix C of the IFC shall be permitted to be used in single family dwelling and townhouse developments which are fully sprinklered as provided for in Sections Section R313.1 or R313.2 of the International Residential Code, with the spacing and distances of fire hydrants indicated in Table C102.1 increased by 100%.

- E. The following changes shall be made to Section 508, Fire Command Center:
  - 1. Change Section 508.1 to read:

(N)508.1 508.1 General. Where required by the applicable building code or where otherwise provided, a fire command center for fire department operations shall comply with Sections 508.1.1 through 508.1.6.

- 2. Delete Section 508.1.1.
- 3. Change Section 508.1.2 to read:

(N)508.1.2 508.1.2 Separation. Fire-rated construction shall be maintained in accordance with Section 703 of this code.

- 4. Delete Section 508.1.3.
- 5. Change Section 508.1.4 to read:

(N)508.1.4 508.1.4 Layout approval. A layout of the fire command center and all features shall be submitted for approval prior to modification.

- 6. Change Section 508.1.6 to read:
  - (N) 508.1.6 508.1.6 Required features. In addition to the features required by the applicable building code, the fire command center shall contain the following:
  - 1. A telephone for fire department use with controlled access to the public telephone system.
  - 2. Schematic building plans indicating the typical floor plan and detailing the building core, means of egress, fire protection systems, firefighter air-replenishment systems, firefighting equipment, and fire department access and the location of fire walls, fire barriers, fire partitions, smoke barriers, and smoke partitions.

- 3. An approved building information card that includes all of the following information:
- 3.1. General building information that includes property name, address, the number of floors in the building above and below grade, use and occupancy classification (for mixed uses, identify the different types of occupancies on each floor), and the estimated building population during the day, night, and weekend;
- 3.2. Building emergency contact information that includes a list of the building's emergency contacts including building manager, building engineer, and their respective work phone numbers, cell phone numbers, and email addresses;
- 3.3. Building construction information that includes the type of building construction including floors, walls, columns, and roof assembly;
- 3.4. Exit access stairway and exit stairway information that includes number of exit access stairways and exit stairways in building; each exit access stairway and exit stairway designation and floors served; location where each exit access stairway and exit stairway discharges; interior exit stairways that are pressurized; exit stairways provided with emergency lighting; each exit stairway that allows reentry; exit stairways providing roof access; elevator information that includes: number of elevator banks, elevator bank designation, elevator car numbers, and respective floors that they serve; location of elevator machine rooms; control rooms and control spaces; location of sky lobby; and location of freight elevator banks;
- 3.5. Building services and system information that includes location of mechanical rooms, location of building management system, location and capacity of all fuel oil tanks, location of emergency generator, and location of natural gas service;
- 3.6. Fire protection system information that includes location of standpipes, location of fire pump room, location of fire department connections, floors protected by automatic sprinklers, and location of different types of automatic sprinkler systems installed including dry, wet, and preaction; and
- 3.7. Hazardous material information that includes: location and quantity of hazardous material.
- 4. Work table.
- F. The following changes shall be made to Section 510, Maintenance of In-Building Emergency Communication Equipment:

Change Sections 510.1 through 510.3 <u>and delete Sections</u> 510.4 through 510.6, including subsections.

# Sections 510.1 through 510.3 to read:

- 510.1 General. In-building emergency communication equipment shall be maintained in accordance with USBC and the provisions of this section.
- 510.2 Additional in-building emergency communications installations. If it is determined by the locality that increased amplification of their emergency communication system is needed, the building owner shall allow the locality access as well as provide appropriate space within the building to install and maintain necessary additional communication equipment by the locality. If the building owner denies the locality access or appropriate space, or both, the building owner shall be responsible for the installation and maintenance of these additional systems.
- 510.3 Field tests. After providing reasonable notice to the owner or the owner's representative, the fire official, police chief, or their agents shall have the right during normal business hours, or other mutually agreed upon time, to enter onto the property to conduct field tests to verify that the required level of radio coverage is present at no cost to the owner.

# 13VAC5-51-133.5. IFC Chapter 6 Building Services and Systems.

- A. The following changes shall be made to Section 601, General:
  - 1. Change Section 601.1 to read:
  - 601.1 Scope. The provisions of this chapter shall apply to the operation and maintenance of fuel-fired appliances and heating systems, emergency and standby power systems, electrical systems, and equipment, mechanical refrigeration systems, elevator recall, stationary storage battery systems, and commercial kitchen equipment.
  - 2. Change Section 601.2 to read:
    - 601.2 Permits. Permits shall be obtained for refrigeration systems, battery systems and solar photovoltaic power systems as set forth in Section 107.2.
- B. The following changes shall be made to Section 603, Fuel-Fired Appliances:
  - 1. Change Section 603.1 to read:
  - (N)603.1 603.1 Installation. The installation of nonportable fuel gas appliances and systems shall comply with the applicable building code. The use of all other fuel-fired appliances, other than internal combustion engines, oil lamps and portable devices such as blow torches, melting pots and weed burners, shall comply with this section.

## 2. Change Section 603.1.1 to read:

(N)603.1.1 603.1.1 Manufacturer's instructions. Appliances shall be maintained in accordance with the manufacturer's instructions and applicable federal, state, and local rules and regulations. Where it becomes necessary to change, modify, or alter a manufacturer's instructions in any way, written approval shall first be obtained from the manufacturer.

- 3. Delete Section 603.1.2.
- 4. Change Section 603.1.3 to read:

(N)603.1.3 603.1.3 Electrical wiring and equipment. Electrical wiring and equipment used in connection with oil-burning equipment shall be maintained in accordance with Section 605 and NFPA 70.

5. Change Section 603.1.5 to read:

(N)603.1.5 603.1.5 Access. Appliances shall be readily accessible for cleaning hot surfaces; removing burners; replacing motors, controls, air filters, chimney connectors, draft regulators, and other working parts; and for adjusting, cleaning, and lubricating parts.

6. Change Section 603.1.6 to read:

(N)603.1.6 603.1.6 Testing, diagrams and instructions. Following servicing or maintenance of oil-burning equipment, operation and combustion performance tests shall be conducted to determine that the burner is in proper operating condition and that all accessory equipment, controls, and safety devices function properly.

7. Change Section 603.1.6.1 to read:

(N)603.1.6.1 603.1.6.1 Diagrams. Two copies of diagrams showing the main oil lines and controlling valves shall be provided, one copy of which shall be posted at the oil-burning equipment and another at an approved location that will be accessible in case of emergency.

## 8. Change Section 603.1.7 to read:

(N)603.1.7 Clearances. Working clearances between oil-fired appliances and electrical panelboards and equipment shall be in accordance with NFPA 70. Clearances between oil fired equipment and oil supply tanks shall be in accordance with NFPA 31.

9. 8. Change Section 603.2 to read:

(N)603.2 603.2 Chimneys. Masonry, metal, and factory-built chimneys shall be maintained in accordance with the applicable building code- and NFPA 211.

10. 9. Change Section 603.3 to read:

(N)603.3 603.3 Fuel oil storage systems. Fuel oil storage systems shall be maintained as provided by the applicable building code.

11. 10. Change Section 603.3.1 to read:

(N)603.3.1 G03.3.1 Fuel oil storage in outside, aboveground tanks. Where connected to a fuel-oil piping system, the maximum amount of fuel oil storage allowed outside above ground without additional protection shall be 660 gallons (2498 L) unless otherwise installed in accordance with the applicable building code. The storage of fuel oil above ground in quantities exceeding 660 gallons (2498 L) shall comply be maintained in accordance with NFPA 31.

12. 11. Change Section 603.3.2 to read:

(N)603.3.2 603.3.2 Fuel oil storage inside buildings. Fuel oil storage inside buildings shall be maintained in accordance with the applicable building code.

13. 12. Change Section 603.3.2.1 to read:

(N)603.3.2.1 603.3.2.1 Quantity limits. The amount of fuel oil storage in fuel oil storage tanks inside buildings shall not exceed that amount approved under the applicable building code.

14. 13. Change Section 603.3.2.2 to read:

(N)603.3.2.2 603.3.2.2 Restricted use and connection. Tanks subject to Section 603.3.2 shall be used only as approved under the applicable building code. Closed piping systems shall be maintained in accordance with the applicable building code.

15. 14. Change Section 603.3.2.3 to read:

(N)603.3.2.3 603.3.2.3 Applicability of maximum allowable quantity and control area requirements. The quantity of combustible liquid stored in tanks subject to Section 603.3.2 shall not be counted toward the maximum allowable quantity set forth in Table 5003.1.1(1), and such tanks shall not be required to be located in a control area when there are such allowances under the applicable building code.

16. 15. Change Section 603.3.2.4 and delete Sections 603.3.2.5 and 603.3.2.6:

Section 603.3.2.4 to read:

(N)603.3.2.4 603.3.2.4 Installation. Tanks and piping systems shall be maintained in accordance with the applicable building code.

17. 16. Change Section 603.3.2.5 603.3.2.7 to read:

(N)603.3.2.5 603.3.2.7 Tanks in basements. Tanks in basements shall be maintained in accordance with the applicable building code.

18. 17. Change Section 603.3.3 to read:

(N)603.3.3 603.3.3 Underground storage of fuel oil. The storage of fuel oil in underground storage tanks shall be maintained in accordance with the applicable building code.

19. 18. Change Section 603.5 to read:

(N)603.5 603.5 Heating appliances. Heating appliances shall be maintained in accordance with the applicable building code.

20. 19. Change Section 603.5.1 to read:

(N)603.5.1 603.5.1 Guard against contact. The heating element or combustion chamber guard shall be maintained so as to prevent accidental contact by persons or material to the extent required by the applicable building code.

21. 20. Change Section 603.5.2 to read:

(N)603.5.2 603.5.2 Heating appliance installation and maintenance. Heating appliances shall be maintained in accordance with the applicable building code.

22. 21. Change Section 603.6 to read:

(N)603.6 603.6 Chimneys and appliances. Chimneys, incinerators, smokestacks or similar devices for conveying smoke or hot gases to the outer air and the stoves, furnaces, fireboxes or boilers to which such devices are connected shall be maintained in accordance with the applicable building code.

23. 22. Change Section 603.6.1 to read:

(N)603.6.1 603.6.1 Masonry chimneys. Masonry chimneys that, upon inspection, are found to be without a flue liner and that have open mortar joints that will permit smoke or gases to be discharged into the building or that are cracked as to be dangerous shall be repaired in accordance with the applicable building code.

24. 23. Change Section 603.6.2 to read:

(N)603.6.2 603.6.2 Metal chimneys. Metal chimneys that are corroded shall be repaired or replaced.

25. Change Section 603.6.3 to read:

(N)603.6.3 Decorative shrouds. Decorative shrouds installed at the termination of factory built chimneys shall be removed except where such shrouds are listed and labeled for use with the specific factory built chimney system and are installed in accordance with the chimney manufacturer's instructions.

26. 24. Change Section 603.6.4 to read:

(N)603.6.4 603.6.4 Factory-built chimneys. Existing factory-built chimneys that are corroded shall be repaired or replaced.

<del>27.</del> 25. Change Section 603.6.5 to read:

(N)603.6.5 603.6.5 Connectors. Existing chimney and vent connectors that are damaged or corroded shall be repaired or replaced.

28. 26. Add a note to Section 603.7 to read:

Note: The fire code official may request a copy of the latest certificate of inspection from the Virginia Department of Labor and Industry for boilers and pressure vessels subject to such requirements. When the certificate is not available, the fire code official shall notify the Department of Labor and Industry to ensure that the required maintenance and testing is performed in accordance the Virginia Boiler and Pressure Vessel Regulations (16VAC25-50).

29. 27. Change Section 603.8 to read:

(N)603.8 603.8 Incinerators. Commercial, industrial and residential-type incinerators and chimneys shall be maintained as installed in accordance with the applicable building code.

30. 28. Change Section 603.8.1 to read:

(N)603.8.1 603.8.1 Residential incinerators. Residential incinerators not regulated by the applicable building code shall be of an approved type.

31. 29. Change Section 603.8.2 to read:

 $\frac{\text{(N)}603.8.2}{\text{603.8.2}}$  Spark arrestor. Incinerators not regulated by the applicable building code shall be equipped with an effective means for arresting sparks.

32. 30. Delete Section 608.8.6 603.8.6.

C. The following changes shall be made to Section 604, Emergency and Standby Power Systems:

1. Change Section 604.1 to read:

(N)604.1 General. Emergency power systems and standby power systems shall be maintained in accordance with the applicable building code.

2. Change Section 604.1.1 to read:

(N)604.1.1 Generators Emergency and standby power generators shall be listed.

3. Delete Section 604.1.2.

4. Change Section 604.1.3 to read:

(N)604.1.3 Load transfer. Emergency power systems shall automatically provide secondary power within 10

seconds after primary power is lost unless specified otherwise by the applicable building code. Standby power systems shall automatically provide secondary power within 60 seconds after primary power is lost unless specified otherwise by the applicable building code.

#### 5. Change Section 604.1.4 to read:

(N)604.1.4 Load duration. Emergency power systems and standby power systems shall require power for a minimum duration of hours without being refueled or recharged, unless otherwise specified by the applicable building code.

# 6. Change Section 604.1.5 to read:

(N)604.1.5 Uninterruptable power source. An uninterrupted source of power shall be provided for equipment where required by the manufacturer's instructions, the listing, the applicable building code, or the applicable referenced standards.

## 7. Change Section 604.1.6 to read:

(N)604.1.6 Interchangeability. Emergency power systems shall be an acceptable alternative for installations that require standby power systems when permitted by the applicable building code.

#### 8. Delete Section 604.1.7.

## 9. Change Section 604.1.8 to read:

604.1.8 Maintenance. Existing installations shall be maintained in accordance with the original approval and Section 604.4.

#### 10. Change Section 604.2 to read:

(N)604.2 Specific equipment requirements. Emergency and standby power systems shall be maintained in accordance with Sections 604.2.1 through 604.2.16.

# 11. Change Section 604.2.1 to read:

(N)604.2.1 Elevators and platform lifts. Standby power shall be maintained in accordance with NFPA 72 for elevators and platform lifts required by the applicable building code.

#### 12. Change Section 604.2.2 to read:

(N)604.2.2 Emergency alarm systems. Emergency power shall be maintained for emergency alarm systems as required by applicable building code.

## 13. Delete Section 604.2.3.

# 14. Change Section 604.2.4 to read:

(N)604.2.4 Emergency voice or alarm communication systems. Emergency power shall be maintained for emergency voice or alarm communication systems as

required by the applicable building code. The system shall be capable of powering the required load for a duration of not less than 24 hours, as required in NFPA 72.

#### 15. Change Section 604.2.5 to read:

(N)604.2.5 Exit signs. Emergency power for exit signs shall be capable of powering the required load for a duration of not less than 90 minutes unless otherwise specified by the applicable building code.

## 16. Change Section 604.2.6 to read:

(N)604.2.6 Group I 2 occupancies. Essential electrical systems for Group I 2 occupancies shall be maintained in accordance with NFPA 70 when required by applicable building code.

#### 17. Change Section 604.2.7 to read:

(N)604.2.7 Group I 3 occupancies. Power operated sliding doors or power-operated locks for swinging doors in Group I 3 occupancies shall be operable by a manual release mechanism at the door and emergency power provided for the doors and locks shall be maintained where required by the applicable building code.

#### 18. Change Section 604.2.8 to read:

(N)604.2.8 Hazardous materials. Emergency and standby power shall be maintained in accordance with NFPA 70 in occupancies with hazardous materials when required by the applicable building code.

# 19. Delete Section 604.2.9.

#### 20. Change Section 604.2.10 to read:

(N)604.2.10 Horizontal sliding doors. Standby power shall be maintained in accordance with NFPA 70 for horizontal sliding doors as required by the applicable building code. The standby power supply shall have a capacity to operate not fewer than 50 closing cycles of the door unless otherwise specified by the applicable building code.

## 21. Change Section 604.2.11 to read:

(N)604.2.11 Hydrogen fuel gas rooms. Standby power shall be maintained in accordance with NFPA 70 for hydrogen fuel gas rooms as required by the applicable building code.

#### 22. Change Section 604.2.12 to read:

(N)604.2.12 Means of egress illumination. Emergency power shall be maintained for means of egress illumination in accordance with the applicable building code.

## 23. Change Section 604.2.13 to read:

(N)604.2.13 Membrane structures. Standby power shall be maintained for auxiliary inflation systems in permanent membrane structures in accordance with applicable building code. Auxiliary inflation systems shall be provided in temporary air supported and air-inflated membrane structures in accordance with Section 3103.10.4.

# 24. Change Section 604.2.14 to read:

(N)604.2.14 Semiconductor fabrication facilities. Emergency power shall be maintained in accordance with NFPA 70 for semiconductor fabrication facilities as required by the applicable building code.

## 25. Change Section 604.2.15 to read:

(N)604.2.15 Smoke control systems. Standby power shall be maintained in accordance with NFPA 70 for smoke control as required by the applicable building code.

# 26. Change Section 604.2.16 to read:

(N) 604.2.16 Underground buildings. Emergency and standby power shall be maintained in accordance with NFPA 70 in underground buildings as required by the applicable building code.

#### 27. Change Section 604.3 to read:

(N)604.3 Critical circuits. Cables used for survivability of required critical circuits shall be listed. Electrical circuit protective systems shall be maintained in accordance with their listing requirements.

#### 28. Change Section 604.4 to read:

604.4 Maintenance. Emergency and standby power systems shall be maintained in accordance with NFPA 70, NFPA 110, and NFPA 111 such that the system is capable of supplying service within the time specified for the type and duration required in accordance with the applicable building code.

## 29. Change Section 604.5 to read:

604.5 Operational inspection and testing. Emergency power systems, including all appurtenant components, shall be inspected and tested under load in accordance with NFPA 110, NFPA 70, and NFPA 111.

Exception: Where the emergency power system is used for standby power or peak load shaving, such use shall be recorded and shall be allowed to be substituted for scheduled testing of the generator set, provided that appropriate records are maintained.

#### 30. Add Section 604.8 to read:

604.8 Testing of battery powered emergency lights and exit signs. Required emergency lighting utilizing battery

powered emergency lights or exit signs, or both, shall be tested annually. The emergency lights and exit signs shall be tested for proper operation for the time period established in the building code in effect when the equipment was installed. Written records of tests shall be retained by the owner of the building for a minimum of two years after the test is conducted and shall be made available to the fire code official upon request.

D. C. The following changes shall be made to Section 605 604, Electric Equipment, Wiring, and Hazards:

# 1. Change Section 605.2 604.2 to read:

605.2 604.2 Illumination. Illumination shall be maintained for service equipment areas, motor control centers, and electrical panelboards.

#### 2. Change Section 605.9 604.9 to read:

(N)605.9 604.9 Temporary wiring. Temporary wiring for electrical power and lighting installations not regulated by the applicable building code is allowed for a period not to exceed 90 days. Temporary wiring methods shall meet the applicable provisions of NFPA 70.

Exception: Temporary wiring for electrical power and lighting installations is allowed during periods of construction, remodeling, repair, or demolition of buildings, structures, equipment, or similar activities.

#### 3. Change Section 605.10.1 604.10.1 to read:

605.10.1  $\underline{604.10.1}$  Listed and labeled. Only portable electric space heaters listed and labeled in accordance with UL 1278 shall be used.

#### 4. Change Section 605.11 to read:

(N)605.11 Solar photovoltaic power systems. Solar photovoltaic power systems shall be maintained in accordance with Sections 605.11.1 through 605.11.2, the applicable building code and NFPA 70.

# 5. Change Section 605.11.1 to read:

(N)605.11.1 Access and pathways. Roof access, pathways, and spacing requirements shall be maintained in accordance with Section 605.11.1.

#### 6. Change Section 605.11.1.1 to read:

(N)605.11.1.1 Roof access points. Roof access points shall be maintained in areas that do not require the placement of ground ladders over openings such as windows or doors and located at strong points of building construction in locations where the access point does not conflict with overhead obstructions such as tree limbs, wires, or signs.

# 7. Delete Section 605.11.1.2.

8. Delete Section 605.11.1.2.1.

- 9. Delete Section 605.11.1.2.2.
- 10. Delete Section 605.11.1.2.3.
- 11. Delete Section 605.11.1.2.4.
- 12. Delete Section 605.11.1.2.5.
- 13. Delete Section 605.11.1.3.
- 14. Delete Section 605.11.1.3.1.
- 15. Delete Section 605.11.1.3.2.
- 16. Delete Section 605.11.1.3.3.
- 17. Change Section 605.11.2 to read:

(N)605.11.2 Ground mounted photovoltaic arrays. A clear, brush free area of 10 feet (3048 mm) shall be maintained for ground mounted photovoltaic arrays.

- E. D. The following changes shall be made to Section 606 605, Mechanical Refrigeration:
  - 1. Change Section 606.1 Sections 605.1 and 605.1.2 and delete Section 605.1.1.

Sections 605.1 and 605.1.2 to read:

606.1 605.1 Scope. Refrigeration systems shall be maintained in accordance with the applicable building code.

- 605.1.2 Ammonia refrigeration. Refrigeration systems using ammonia refrigerant and the buildings in which such systems are installed shall comply with IIAR 7 for operating procedures.
- 2. Change Section 606.2 605.2 to read:

606.2 605.2 Refrigerants. The use and purity of new, recovered, and reclaimed refrigerants shall be in accordance with the applicable building code.

3. Change Section 606.3 605.3 to read:

606.3 605.3 Refrigerant classification. Refrigerants shall be classified in accordance with the applicable building code.

4. Change Section <del>606.4</del> 605.4 to read:

606.4 605.4 Change in refrigerant type. A change in the type of refrigerant in a refrigeration system shall be in accordance with the applicable building code.

5. Change Section 606.6 605.6 to read:

606.6 605.6 Testing of equipment. Refrigeration equipment and systems having a refrigerant circuit containing more than 220 pounds (100 kg) of Group A1 or 30 pounds (14 kg) of any other group refrigerant shall be subject to periodic testing in accordance with Section 606.6.1. Records of tests shall be maintained. Tests of emergency devices or systems required by the applicable

building code shall be conducted by persons trained and qualified in refrigeration systems.

6. Change Section 606.7 605.7 to read:

606.7 605.7 Emergency signs. Refrigeration units or systems having a refrigerant circuit containing more than 220 pounds (100 kg) of Group A1 or 30 pounds (14 kg) of any other group refrigerant shall be provided with approved emergency signs, charts and labels in accordance with NFPA 704. Hazard signs shall be in accordance with the applicable building code for the classification of refrigerants listed therein.

7. Change Section 606.8 Sections 605.8 and 605.8.1 to read:

(N)606.8 605.8 Refrigerant detector detection. Refrigerant detection systems shall be maintained. The alarm shall be actuated at a value not greater than the corresponding threshold limit value-time-weighted average values (TLV TWA) for those agents. Where ammonia is used as the refrigerant, detection shall comply with IIAR 2. Detectors and alarms shall be maintained in approved locations. The detector shall transmit a signal to an approved location. For refrigerants other than ammonia, refrigerant detection shall comply with Section 605.8.1.

605.8.1 Refrigerants other than ammonia. Refrigerant detection systems shall be maintained. The alarm shall be actuated at a value not greater than the corresponding threshold limit value-time-weighted average values (TLV-TWA) for those agents. Detectors and alarms shall be maintained in approved locations. The detector shall transmit a signal to an approved location.

8. Change Section 606.9 605.9 to read:

(N)606.9 605.9 Remote controls. Remote controls required by the applicable building code shall be maintained and accessible at all times as required by that code

9. Change Section 606.9.1 605.9.1 to read:

(N)606.9.1 605.9.1 Refrigeration system emergency shutoff. Emergency shutoffs shall be maintained and accessible at all times.

10. Change Section 606.9.2 605.9.2 to read:

(N)606.9.2 605.9.2 Ventilation system. Ventilation system switches shall be clearly identified and maintained in an approved manner.

11. Change Section 606.10 605.10 to read:

(N)606.10 605.10 Emergency pressure control system. Permanently installed refrigeration systems containing more than 6.6 pounds (3 kg) of flammable, toxic or highly toxic refrigerant or ammonia shall be maintained

as installed in accordance with the applicable building code and this code.

12. Change Section 606.10.1 605.10.1 to read:

(N)606.10.1 605.10.1 Automatic crossover valves. Automatic crossover valves shall be maintained as installed in accordance with the applicable building code.

13. Change Section 606.10.1.1 605.10.1.1 to read:

(N)606.10.1.1 605.10.1.1 Overpressure limit set point. Automatic crossover valves shall be arranged and maintained in accordance with the applicable building code.

14. Change Section 606.10.1.2 to read:

(N)606.10.1.2 605.10.1.2 Manual operation. Manual operation of the automatic crossover valve, where provided, shall be maintained in accordance with the applicable building code.

- 15. Delete Section 606.10.1.3 605.10.1.3.
- 16. Change Section 606.10.2 605.10.2 to read:

(N)606.10.2 605.10.2 Automatic emergency stop. An automatic emergency stop feature shall be maintained in accordance with the applicable building code.

- 17. Delete Section 606.10.2.1 605.10.2.1.
- 18. Delete Section 606.10.2.2 605.10.2.2
- 19. Change Section 606.12 605.12 to read:

(N)606.12 605.12 Discharge and termination of pressure relief and purge systems. Pressure relief devices, fusible plugs and purge systems discharging to the atmosphere from refrigeration systems containing flammable, toxic or highly toxic refrigerants or ammonia shall be maintained in accordance with Sections 606.12.3 through 606.12.5.

20. Delete Section 606.12.1.

21. Change Section 606.12.1.1 to read:

(N)606.12.1.1 Ammonia refrigeration. Refrigeration systems using ammonia refrigerant and the buildings in which such systems are installed shall comply with IIAR 7 for operating procedures.

22. 20. Change Section 606.12.2 605.12.1 to read:

(N)606.12.2 605.12.1 Fusible plugs and rupture members. Unless otherwise required by the applicable building code, discharge piping and devices connected to the discharge side of a fusible plug or rupture member shall have provisions to prevent plugging the pipe in the event the fusible plug or rupture member functions.

23. 21. Change Section 606.12.3 605.12.2 to read:

(N) 606.12.3 605.12.2 Flammable refrigerants. Unless otherwise regulated by the applicable building code, systems containing more than 6.6 pounds (3 kg) of flammable refrigerants having a density equal to or greater than the density of air shall discharge vapor to the atmosphere only through an approved treatment system in accordance with Section 606.12.6 or a flaring system in accordance with Section 606.12.7. Systems containing more than 6.6 pounds (3 kg) of flammable refrigerants having a density less than the density of air shall be permitted to discharge vapor to the atmosphere provided that the point of discharge is located outside of the structure at not less than 15 feet (4572 mm) above the adjoining grade level and not less than 20 feet (6096 mm) from any window, ventilation opening, or exit.

24. 22. Change Section 606.12.4 605.12.3 to read:

(N)606.12.4 605.12.3 Toxic and highly toxic refrigerants. Toxic or highly toxic refrigerant discharge methods shall be maintained in accordance with the applicable building code

25. 23. Change Section 606.12.5 605.12.4 to read:

(N)606.12.5 605.12.4 Ammonia refrigerant. The discharge methods for systems containing more than 6.6 pounds (3 kg) of ammonia refrigerant shall be maintained in accordance with the applicable building code.

26. 24. Change Section 606.12.6 Sections 605.12.5 through 605.12.7 to read:

(N)606.12.6 605.12.5 Treatment systems. Treatment systems for refrigerant gas discharge shall be maintained in accordance with the applicable building code.

(N)606.12.7 605.12.6 Flaring systems. Flaring systems for incineration of flammable refrigerants shall be maintained in accordance with the applicable building code.

27. Change Section 606.12.8 to read:

(N)606.12.8 605.12.7 Ammonia diffusion systems. Ammonia diffusion systems shall be maintained in accordance with the applicable building code.

28. 25. Change Section 606.13 605.13 to read:

(N)606.13 605.13 Discharge location for refrigeration machinery room ventilation. Treatment systems for exhaust from mechanical ventilation systems serving refrigeration machinery rooms containing flammable, toxic or highly toxic refrigerants, other than ammonia, capable of exceeding 25% of the LFL or 50% of the IDLH shall be maintained in accordance with the applicable building code.

Exception: Refrigeration systems containing Group A2L complying with Section 605.17.

29. 26. Change Section 606.16 605.16 to read:

(N)606.16 605.16 Electrical equipment. The hazardous location classification of refrigeration machinery rooms where refrigerants of Groups A2, A3, B2 and B3, as defined in the International Mechanical Code, are used, shall be maintained in accordance with the applicable building code.

# 27. Change Sections 605.17 through 605.17.2 to read:

605.17 Special requirements for Group A2L refrigerant machinery rooms. Machinery rooms with systems containing Group A2L refrigerants shall comply with Sections 605.17.1 through 605.17.2.

605.17.1 Refrigerant detection system. Refrigerant detection systems in machinery rooms shall be maintained in accordance with the applicable building code.

605.17.2 Emergency ventilation system. Emergency ventilation systems shall be maintained in accordance with the applicable building code.

## 28. Delete Table 605.17.2 and Section 605.17.3.

F. E. The following changes shall be made to Section 607 606, Elevator Operation, Maintenance, and Fire Service Keys:

1. Change Section 607.1 606.1 to read:

607.1 606.1 Operation. Existing elevators with a travel distance of 25 feet (7620 mm) or more shall comply with the requirements of Section 607.5 and the USBC, Part III, Maintenance.

2. Change Section <u>607.2</u> <u>606.2</u> to read:

607.2 606.2 Standby power. In buildings and structures where standby power is required or furnished to operate an elevator, standby power shall be maintained in accordance with Section 604. Operation of the system shall be in accordance with Sections 607.2.1 606.2.1 through 607.2.4 606.2.4.

3. Change Section 607.2.4 606.2.4 to read:

607.2.4 606.2.4 Machine room ventilation. Where standby power is connected to elevators, the machine room ventilation or air conditioning shall remain connected to the standby power source in accordance with the applicable building code.

4. Change Section 607.4 606.4 to read:

607.4 606.4 Fire service access elevator lobbies. Where fire service access elevators are required by the

applicable building code, fire service access elevator lobbies shall be maintained free of storage and furniture.

5. Change Section 607.5 606.5 to read:

607.5 606.5 Occupant evacuation elevator lobbies. Where occupant evacuation elevators are provided in under the applicable building code, occupant evacuation elevator lobbies shall be maintained free of storage and furniture.

6. Change Section 607.6 606.6 to read:

607.6 606.6 Water protection of hoistway enclosures. Methods to prevent water from infiltrating into a hoistway enclosure required by the applicable building code shall be maintained.

G. The following changes shall be made to Section 608, Storage Battery Systems:

## 1. Change Section 608.1 to read:

608.1 Scope. Stationary storage battery systems having an electrolyte capacity of more than 50 gallons (189 L) for flooded lead acid, nickel cadmium (Ni Cd), and valve regulated lead acid (VRLA) or more than 1,000 pounds (454 kg) for lithium ion and lithium metal polymer used for facility standby power, emergency power, or uninterruptible power supplies shall comply with this section and Table 608.1 when required by the applicable building code.

# 2. Change Section 608.4 to read:

608.4 Room design and construction. Enclosure of stationary battery systems shall comply with the applicable building code. Battery systems shall be allowed to be in the same room with the equipment they support.

3. Change Section 608.6.1 to read:

(N)608.6.1 Room ventilation. Ventilation shall be maintained in accordance with the applicable building code.

#### 4. Change Section 608.6.2 to read:

(N)608.6.2 Cabinet ventilation. Where VRLA batteries are installed inside a cabinet, the cabinet shall be approved for use in occupied spaces and shall be mechanically or naturally vented in accordance with one of the following methods:

1. The cabinet ventilation shall limit the maximum concentration of hydrogen to 1% of the total volume of the cabinet during the worst-case event of simultaneous "boost" charging of all the batteries in the cabinet.

2. Where calculations are not available to substantiate the ventilation rate, continuous ventilation shall be provided at a rate of not less than 1 cubic foot per minute per

square foot 1 ft<sup>3</sup>/min/ft<sup>2</sup> or 0.0051 m<sup>3</sup>/(sm<sup>2</sup>) of floor area covered by the cabinet. The room in which the cabinet is installed shall be ventilated as required in Section 608.6.1.

5. Change Section 608.6.3 to read:

(N)608.6.3 Supervision. Mechanical ventilation systems where required by Sections 608.6.1 and 608.6.2 shall be supervised by an approved central, proprietary, or remote station service or shall initiate an audible and visual signal at a constantly attended onsite location when required by the applicable building code.

6. Change Section 608.8 to read:

(N)608.8 Seismic protection. Seismic protection required for battery systems shall be maintained in accordance with the applicable building code.

7. Change Section 608.9 to read:

(N)608.9 Smoke detection. Automatic smoke detection system shall be maintained in accordance with Chapter 9 in rooms containing stationary battery systems.

- H. F. The following changes shall be made to Section 609 607, Commercial Kitchen Hoods:
  - 1. Change Section 609.1 607.1 to read:

609.1 607.1 General. Commercial kitchen exhaust hoods shall comply with the requirements of this Section.

2. Change Section 609.2 607.2 to read:

(N)609.2 607.2 Where required. A Type I hood shall be installed at or above all commercial cooking appliances and domestic cooking appliances used for commercial purposes that produce grease vapors in mobile food preparation vehicles.

Exception: A Type I hood shall not be required for an electric cooking appliance where an approved testing agency provides documentation that the appliance effluent contains 5 mg/m³ or less of grease when tested at an exhaust flow rate of 500 cfm (0.236 m³/s) in accordance with UL 710B.

3. Change Section 609.3.3.3 607.3.3.3 to read:

609.3.3.3 607.3.3.3 Records. Records for inspections shall state the individual and company performing the inspection, a description of the inspection, and when the inspection took place. Records for cleanings shall state the individual and company performing the cleaning and when the cleaning took place. Such records shall be completed after each inspection or cleaning and maintained for a minimum of three years and be copied to the fire code official upon request.

4. Change Section <del>609.3.3.3.1</del> 607.3.3.3.1 to read:

609.3.3.3.1 607.3.3.1 Tags. Where a commercial kitchen hood or duct system is inspected or cleaned, a tag containing the service provider name, address, telephone number and date of service shall be provided in a conspicuous location. Prior tags shall be covered or removed.

Exception: Where records required by Section 609.3.3.3 607.3.3.3 are maintained on the premises.

4. <u>G.</u> The following change shall be made to Section 610 608, Commercial Kitchen Hoods Cooking Oil Storage:

Change Section 610.7 608.7 to read:

(N)610.7 608.7 Electrical equipment. Electrical equipment used for the operation of cooking oil storage systems shall comply be maintained in accordance with NFPA 70.

# 13VAC5-51-133.8. IFC Chapter 7 Fire and Smoke Protection Features.

A. The following changes shall be made to Section 701, General:

1. Change Section 701.1 to read:

701.1 Scope. The provisions of this chapter shall govern maintenance of the materials, systems, and assemblies used for structural fire resistance and fire-resistance-rated construction separation of adjacent spaces to safeguard against the spread of fire and smoke within a building and the spread of fire to or from buildings.

2. Change Section 701.2 Sections 701.6 and 701.7 to read:

701.6 Maintenance. The required fire-resistance rating of fire-resistance-rated construction, including walls, firestops, shaft enclosures, partitions, smoke barriers, floors, fire-resistive coatings, and sprayed fire-resistant materials applied to structural members and fire-resistant joint systems, shall be maintained. Such elements shall be visually inspected by the owner annually and properly repaired, restored, or replaced where damaged, altered, breached, or penetrated. Records of inspections and repairs shall be maintained. Where concealed, such elements shall not be required to be visually inspected by the owner unless the concealed space is accessible by the removal or movement of a panel, access door, ceiling tile, or similar movable entry to the space. Openings made therein for the passage of pipes, electrical conduit, wires, ducts, air transfer openings, and holes made for any reason shall be protected with approved methods capable of resisting the passage of smoke and fire. Openings through fire-resistance-rated assemblies shall be protected by self-closing or automatic-closing doors of approved construction meeting the fire protection requirements for the assembly.

701.2 701.7 Unsafe conditions. Where any components in this chapter are not maintained and do not function as intended or do not have the fire resistance required by the code under which the building was constructed, remodeled, or altered, such components or portion thereof shall be deemed an unsafe condition in accordance with Section 110.1.1. Components or portions thereof determined to be unsafe shall be repaired or replaced to conform to that code under which the building was constructed, remodeled, or altered or this chapter, as deemed appropriate by the fire code official.

Where the extent of the conditions of components is such that any building, structure, or portion thereof presents an imminent danger to the occupants of the building, structure, or portion thereof, the fire code official shall act in accordance with Section 110.5.

# B. The following changes shall be made to Section 703, Fire Resistance Rated Construction:

#### 1. Change Section 703.1 to read:

703.1 Maintenance. The required fire resistance rating of fire resistance rated construction, including walls, firestops, shaft enclosures, partitions, smoke barriers, floors, fire resistive coatings, and sprayed fire resistant materials applied to structural members and fire resistant joint systems, shall be maintained. Such elements shall be visually inspected by the owner annually and properly repaired, restored, or replaced where damaged, altered, breached, or penetrated. Records of inspections and repairs shall be maintained. Where concealed, such elements shall not be required to be visually inspected by the owner unless the concealed space is accessible by the removal or movement of a panel, access door, ceiling tile, or similar movable entry to the space. Openings made therein for the passage of pipes, electrical conduit, wires, ducts, air transfer openings, and holes made for any reason shall be protected with approved methods capable of resisting the passage of smoke and fire. Openings through fire resistance rated assemblies shall be protected by self closing or automatic closing doors of approved construction meeting the fire protection requirements for the assembly.

Exception: When requested by the building owner and approved by the fire official, the visual inspection required by 703.1 may be modified to a time period greater than annually based on the history of the previous inspections.

#### 2. Change Section 703.1.1 to read:

703.1.1 Fireblocking and draftstopping. Required fireblocking and draftstopping in combustible concealed spaces shall be maintained to provide continuity and integrity of the construction.

## 3. Change Section 703.2.1 to read:

703.2.1 Testing. Opening protectives shall be inspected and tested annually in accordance with NFPA 80 to confirm proper operation and full closure. A written record shall be maintained and be available to the fire code official.

#### 4. Change Section 703.2.2 to read:

703.2.2 Signs. Where required by the fire code official, a sign shall be permanently displayed on or near each fire door in letters not less than 1 inch (25 mm) high to read as follows:

- 1. For doors designed to be kept normally open: FIRE DOOR—DO NOT BLOCK.
- 2. For doors designed to be kept normally closed: FIRE DOOR—KEEP CLOSED.

# 5. Change Section 703.2.3 to read:

703.2.3 Hold-open devices and closers. Hold-open devices and automatic door closers, where provided, shall be maintained. During the period that such device is out of service for repairs, the door it operates shall remain in the closed position.

#### 6. Add new Section 703.2.4 to read:

703.2.4 Door operation. Swinging fire doors shall close from the full open position and latch automatically. The door closer shall exert enough force to close and latch the door from any partially open position.

C. B. The following changes change shall be made to Section 704, Floor Openings and Shafts: Joints and Voids:

#### 1. Change Section 704.1 to read:

704.1 Enclosure. New floor openings in existing buildings shall comply with the International Building Code.

# 2. Change Section 704.2 to read:

(N) 704.2 704.2 Opening protectives. Where openings are required to be protected, opening protectives and associated closing devices shall be maintained as self-closing or automatic-closing.

<u>C. The following changes shall be made to Section 705,</u> <u>Door and Window Openings:</u>

# 1. Change Section 705.2.2 to read:

705.2.2 Signs. Where required by the fire code official, a sign shall be permanently displayed on or near each fire door in letters not less than 1 inch (25 mm) high to read as follows:

For doors designed to be kept normally open: FIRE DOOR – DO NOT BLOCK.

For doors designed to be kept normally closed: FIRE DOOR – KEEP CLOSED.

2. Change Section 705.2.3 to read:

705.2.3 Hold-open devices and closers. Hold-open devices and automatic door closers, where provided, shall be maintained. During the period that such device is out of service for repairs, the door it operates shall remain in the closed position.

3. Change Section 705.2.4 to read:

705.2.4 Door operation. Swinging fire door operations shall be maintained in accordance with the applicable building code.

4. Change Section 705.2.5 to read:

705.2.5 Smoke-activated and heat-activated doors. Smoke-activated doors shall be maintained to self-close or automatically close upon detection of smoke in accordance with the applicable building code.

5. Change Section 705.2.6 to read:

705.2.6 Testing. Opening protectives shall be inspected and tested annually in accordance with NFPA 80 to confirm proper operation and full closure. A written record shall be maintained and be available to the fire code official.

<u>D. The following change shall be made to Section 707, Concealed Spaces:</u>

Change Section 707.1 to read:

707.1 Fireblocking and draftstopping. Required fireblocking and draftstopping in combustible concealed spaces shall be maintained to provide continuity and integrity of the construction.

# 13VAC5-51-134. IFC Chapter 8 Interior Finish, Decorative Materials and Furnishings.

A. Change Section 801.1 to read:

801.1 Scope. The provisions of this chapter shall govern interior finish, interior trim, furniture, furnishings, decorative materials and decorative vegetation in buildings.

B. Change the title of Section 803 and Section 803.1 to read:

Section 803 Interior Wall and Ceiling Finish and Trim in Buildings

(N)803.1 803.1 General. The provisions of this section shall apply to the maintenance of interior wall and ceiling finishes and interior wall and ceiling trim in existing buildings in accordance with the applicable building code.

C. Delete Change Section 803.1.1. to read:

D. Change Section 803.1.2 to read:

(N)803.1.2 <u>803.1.1</u> Classification. Interior wall or ceiling finishes shall be classified and tested in accordance with the applicable building code.

E. D. Delete Section 803.1.2.1 803.1.1.1.

E. Delete Sections 803.1.2 and 803.1.3.

F. Change Sections 803.2 and 803.3 to read:

(N)803.2 803.2 Stability. Interior finish materials regulated by this chapter shall be applied or otherwise fastened in accordance with the applicable building code.

(N)803.3 803.3 Interior finish requirements. Interior wall and ceiling finish shall have a flame spread index not greater than that approved under the applicable building code.

G. Delete Table 803.3.

H. Change Section 803.5 to read:

(N)803.5 803.5 Textiles. Where used as interior wall or ceiling finish materials, textiles, including materials having woven or nonwoven, napped, tufted, looped or similar surface, shall comply with the requirements of the applicable building code.

- I. Delete Sections 803.5.1 and, 803.5.1.1, 803.5.2, and 803.6.
- J. Change Sections <del>803.5.2 through</del> <u>803.7</u>, 803.8, <u>803.10</u>, and 803.11 to read:

(N)803.5.2 Newly introduced textile wall and ceiling coverings. Newly introduced textile wall and ceiling coverings shall be approved by the building official.

(N)803.6 803.7 Expanded vinyl wall or ceiling coverings. Expanded vinyl wall or ceiling coverings shall be maintained in accordance with the applicable building code

(N)803.7 Facings or wood veneers intended to be applied on site over a wood substrate. Facings or veneers intended to be applied on site over a wood substrate shall be maintained in accordance with the applicable building code.

(N)803.8 Foam plastic materials. Foam plastic materials shall not be used as interior wall and ceiling finish unless specifically allowed by the applicable building code.

K. Delete Sections 803.8.1 through 803.8.3.

L. Change Section 803.10, the title of Section 804, and Section 804.1 to read:

803.8 Expanded vinyl ceiling coverings. Expanded vinyl ceiling coverings shall be maintained in accordance with the applicable building code.

(N)803.10 803.10 Site-fabricated stretch systems. Where used as newly installed interior wall or interior ceiling finish materials, site-fabricated stretch systems containing all three components described in the definition in Chapter 2 shall be tested in accordance with the applicable building code.

803.11 Foam plastic materials. Foam plastic materials shall not be used as interior wall and ceiling finish unless specifically allowed by the applicable building code.

<u>K. Delete Sections 803.11.1 and 803.11.2 and change</u> Section 803.12 to read:

803.12 Facings or wood veneers intended to be applied on site over a wood substrate. Facings or veneers intended to be applied on site over a wood substrate shall be maintained in accordance with the applicable building code.

L. Change the title of Section 804 and Section 804.1 to read:

Section 804 Interior Wall and Ceiling Trim and Interior Floor Finish in Buildings

(N)804.1 804.1 Interior trim. Material, other than foam plastic, used as interior trim shall be maintained in accordance with the applicable building code.

- M. Delete Section Sections 804.1.1 and 804.1.2.
- N. Change Sections Section 804.2 to read:

(N)804.2 <u>804.2</u> Foam plastic. Foam plastic used as interior trim shall be maintained in accordance with the applicable building code.

- O. Delete Sections 804.2.1 through 804.2.4.
- P. Change Sections 804.3 through 804.4 to read:

(N)804.3 804.3 Interior floor finish. Interior floor finish and floor covering materials shall be maintained in accordance with the applicable building code.

(N)804.3.1 804.3.1 Classification. Interior floor finish and floor covering materials shall be classified in accordance the applicable building code.

(N)804.3.2 804.3.2 Testing and identification. Interior floor finish and floor covering materials shall be tested in accordance with the applicable building code.

(N)804.3.3 804.3.3 Interior floor finish requirements. Interior floor coverings materials shall comply with Sections 804.3.3.1 and 804.3.3.2, and interior floor finish materials shall comply with Section 804.3.1.

(N)804.3.3.1 <u>804.3.3.1</u> Testing. Floor covering material shall be testing in accordance with the applicable building code.

(N)804.3.3.2 <u>804.3.3.2</u> Minimum critical radiant flux. In all occupancies, new interior floor finish and floor

covering materials in enclosures for stairways and ramps, exit passageways, corridors and rooms or spaces not separated from corridors by full-height partitions extending from the floor to the underside of the ceiling shall withstand a minimum critical radiant flux as required by the applicable building code.

(N)804.4 804.4 Interior floor-wall base. Interior floor-wall base shall be maintained in accordance with the applicable building code.

Q. Change the title of Section 805 and Sections 805.1.1.2, 805.1.2.2, 805.2.1.2, 805.2.2.2, 805.4.1.2, and 805.4.2.2 to read:

Section 805 Upholstered Furniture and Mattresses in Buildings

- 805.1.1.2 Heat release rate. Newly introduced upholstered furniture shall have limited rates of heat release when tested in accordance with ASTM E 1537 or California Technical Bulletin 133, as follows:
  - 1. The peak rate of heat release for the single upholstered furniture item shall not exceed 80 kW.

Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard.

2. The total energy released by the single upholstered furniture item during the first 10 minutes of the test shall not exceed 25 megajoules (MJ).

Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.

- 805.1.2.2 Heat release rate. Newly introduced mattresses shall have limited rates of heat release when tested in accordance with ASTM E 1590 or California Technical Bulletin 129, as follows:
  - 1. The peak rate of heat release for the single mattress shall not exceed 100 kW.

Exception: Mattresses in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.

2. The total energy released by the single mattress during the first 10 minutes of the test shall not exceed 25 MJ.

Exception: Mattresses in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.

805.2.1.2 Heat release rate. Newly introduced upholstered furniture shall have limited rates of heat release when tested in accordance with ASTM E 1537 or California Technical Bulletin 133, as follows:

1. The peak rate of heat release for the single upholstered furniture item shall not exceed 80 kW.

Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard.

2. The total energy released by the single upholstered furniture item during the first 10 minutes of the test shall not exceed 25 MJ.

Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.

- 805.2.2.2 Heat release rate. Newly introduced mattresses shall have limited rates of heat release when tested in accordance with ASTM E 1590 or California Technical Bulletin 129, as follows:
  - 1. The peak rate of heat release for the single mattress shall not exceed  $100\ kW$ .

Exception: Mattresses in rooms or spaces protected by an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard.

2. The total energy released by the single mattress during the first 10 minutes of the test shall not exceed 25 MJ.

Exception: Mattresses in rooms or spaces protected by an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard.

- 805.4.1.2 Heat release rate. Newly introduced upholstered furniture shall have limited rates of heat release when tested in accordance with ASTM E 1537 or California Technical Bulletin 133, as follows:
  - 1. The peak rate of heat release for the single upholstered furniture item shall not exceed 80 kW.

Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.

2. The total energy released by the single upholstered furniture item during the first 10 minutes of the test shall not exceed 25 MJ.

Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.

805.4.2.2 Heat release rate. Newly introduced mattresses shall have limited rates of heat release when tested in accordance with ASTM E 1590 or California Technical Bulletin 129, as follows:

1. The peak rate of heat release for the single mattress shall not exceed 100 kW.

Exception: Mattresses in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.

2. The total energy released by the single mattress during the first 10 minutes of the test shall not exceed 25 MJ.

Exception: Mattresses in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.

R. Change the title of Section 806 <u>and Exception 1 in Section 806.1.1</u> and add <u>exception Exception</u> 3 in Section 806.1.1 to read:

Section 806 Decorative Vegetation in Buildings

- 1. Trees located in areas protected by an automatic sprinkler system in accordance with the applicable NFPA 13 standard.
- 3. Trees shall be permitted in places of worship in Group A occupancies.
- S. Change the title of Section 807 and exception 1 in Section 807.3 and Exceptions 1 and 2 in Section 807.2 to read:

Section 807 Decorative Materials Other Than Decorative Vegetation in Buildings

- 1. In auditoriums in Group A, the permissible amount of curtains, draperies, fabric hangings, and other similar combustible decorative material materials suspended from walls or ceilings shall not exceed 75% of the aggregate wall area where the building is equipped throughout with an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard building code and where the material is installed in accordance with Section 803.15 of the applicable building code International Building Code.
- 2. In Group R-2 dormitories, within sleeping units and dwelling units, the permissible amount of curtains, draperies, fabric hangings, and similar decorative materials suspended from walls or ceilings shall not exceed 50% of the aggregate wall areas where the building is equipped throughout with an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.
- T. Change exception 2 in Section 807.3 to read:
  - 2. In dwelling units or sleeping rooms in Group R 2 dormitories, the permissible amount of decorative material suspended from or attached to the walls shall not exceed 50% of the aggregate area of the walls where the building has an approved automatic sprinkler system or 20% of the aggregate area of the walls where approved smoke alarms are provided and in the corridors of such

buildings, the permissible amount of decorative material suspended from or attached to the walls shall not exceed 10% of the aggregate area of the walls.

## U. T. Change the Exception to 807.4 to read:

Exception: Testing of artificial vegetation is not required in Group I-1; Group I-2, Condition 1; Group R-2; Group R-3; or Group R-4 occupancies equipped throughout with an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard, where such artificial vegetation complies with the following:

- 1. Wreaths or other decorative items on doors shall not obstruct the door operation and shall not exceed 50% of the surface area of the door.
- 2. Decorative artificial vegetation shall be limited to not more than 30% of the wall area to which it is attached.
- 3. Decorative artificial vegetation not on doors or walls shall not exceed 3 feet (914 mm) in any dimension.

# <u>U.</u> Change Section Sections 807.5.1.2 and 807.5.2.1 to read:

807.5.1.2 Motion picture screens. The screens upon which motion pictures are projected in buildings of Group A shall either meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 or shall comply with the requirements for a Class B interior finish in accordance with the applicable building code.

# V. Change Section 807.5.2.1 to read:

807.5.2.1 Storage in corridors and lobbies. Clothing and personal effects shall not be stored in corridors and lobbies.

#### Exceptions:

- Corridors protected by an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard.
- 2. Corridors protected by an approved fire alarm system installed in accordance with NFPA 72.
- 3. Storage in metal lockers, provided the minimum required egress width is maintained.

# W. V. Change Sections 807.5.3.1 through 807.5.3.4 to read:

807.5.3.1 Group I-1 and Group I-2 Condition 1 within units. In Group I-1 and Group I-2 Condition 1 occupancies, equipped with an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard, within sleeping units and dwelling units, combustible decorative materials placed on walls shall be limited to not more than 50% of the wall area to which they are attached.

807.5.3.2 In Group I-1 and Group I-2 Condition 1 for areas other than within units. In Group I-1 and Group I-2 Condition 1 occupancies, equipped with an approved

automatic sprinkler system installed in accordance with the applicable NFPA 13 standard, combustible decorative materials placed on walls in areas other than within dwelling and sleeping units shall be limited to not more than 30% of the wall area to which they are attached.

807.5.3.3 In Groups I-2 Condition 2. In Group I-2 Condition 2 occupancies, equipped with an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard, combustible decorative materials placed on walls shall be limited to not more than 30% of the wall area to which they are attached.

807.5.3.4 Other areas in Groups I-1 and I-2. In Group I-1 and I-2 occupancies, in areas not equipped with an approved automatic sprinkler system, combustible decorative materials shall be of such limited quantities that a hazard of fire development or spread is not present.

# X. W. Change Section 807.5.5.1 to read:

807.5.5.1 Storage in corridors and lobbies. Clothing and personal effects shall not be stored in corridors and lobbies.

## **Exceptions:**

- Corridors protected by an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard.
- 2. Corridors protected by an approved fire alarm system installed in accordance with Section 907.
- 3. Storage in metal lockers, provided the minimum required egress width is maintained.
- Y. X. Change the title of Section 808 and Sections 808.1 and, 808.2, and 808.4 to read:

Section 808 Furnishings Other Than Upholstered Furniture and Mattresses or Decorative Materials in Buildings

808.1 Wastebaskets and linen containers in Groups I-1, I-2, and I-3 occupancies and Group B ambulatory care facilities. Wastebaskets, linen containers, and other waste containers, including their lids, located in Groups I-1, I-2, I-3 occupancies shall be constructed and noncombustible materials or of materials that meet a peak rate of heat release not exceeding 300 kW/m<sup>2</sup> when tested in accordance with ASTM E 1354 at an incident heat flux of 50 kW/m<sup>2</sup> in the horizontal orientation. Metal wastebaskets and other metal waste containers with a capacity of 20 gallons (75.7 L) or more shall be listed in accordance with UL 1315 and shall be provided with a noncombustible lid. Portable containers exceeding 32 gallons (121 L) shall be stored in an area classified as a waste and linen collection room and constructed in accordance with the applicable building code.

808.2 Waste containers with a capacity of 20 gallons or more in Group R-2 college and university dormitories.

Waste containers, including their lids, located in Group R-2 college and university dormitories, and with a capacity of 20 gallons (75.7 L) or more, shall be constructed of noncombustible materials or of materials that meet a peak rate of heat release not exceeding 300 kW/m² when tested in accordance with ASTM E 1354 at an incident heat flux of 50 kW/m² in the horizontal orientation. Metal wastebaskets and other metal waste containers with a capacity of 20 gallons (75.7 L) or more shall be listed in accordance with UL 1315 and shall be provided with a noncombustible lid. Portable containers exceeding 32 gallons (121 L) shall be stored in an area classified as a waste and linen collection room constructed in accordance with the applicable building code.

808.4 Combustible lockers. Where lockers constructed of combustible materials are used, the lockers shall be considered to be interior finish and shall comply with Section 803.

Exception: Lockers constructed entirely of wood and noncombustible materials shall be permitted to be used wherever interior finish materials are required to meet Class C classification in accordance with the applicable building code.

# 13VAC5-51-135. IFC Chapter 9 Fire Protection Systems.

A. The following changes shall be made to Section 901, General:

- 1. Change Section 901.1 to read:
  - 901.1 Scope. The provisions of this chapter shall apply to the inspection, operation, testing and maintenance of all fire protection systems.
- 2. Delete Sections 901.2 and 901.2.1.
- 3. Change Section 901.3 to read:
  - 901.3 Permits. Permits shall be required as set forth in Section 107.2.
- 4. Change Sections 901.4 and 901.4.1 to read:

(N)901.4 901.4 Maintenance and alterations. Fire protection systems shall be maintained in accordance with the original installation standards for that system. Alterations and repairs to fire protection systems shall be done in accordance with the applicable building code and the applicable standards.

(N)901.4.1 901.4.1 Required fire protection systems. Fire protection systems shall be repaired, operated, tested and maintained in accordance with this code. A fire protection system for which a design option, exception or reduction to the provisions of this code or the applicable building code has been granted shall be considered to be a required system.

- 5. Change Section 901.4.2 to read:
  - 901.4.2 Nonrequired fire protection systems. Nonrequired fire protection systems shall be maintained to function as originally installed. If any such systems are to be reduced in function or discontinued, approval shall be obtained from the building official in accordance with Section 103.8.1 103.3.1 of Part I of the USBC (13VAC5-63-30 E).
- 6. Change Section 901.4.3 to read:

(N)901.4.3 901.4.3 Fire areas. Where buildings, or portions thereof, are divided into fire areas so as not to exceed the limits established for requiring a fire protection system in accordance with the applicable building code, such fire areas shall be maintained.

- 7. Delete Section 901.4.4.
- 8. Change Section Sections 901.4.6, 901.4.6.3, and 901.4.6.4 to read:

(N)901.4.6 901.4.6 Pump and riser room size. Where provided, fire pump rooms and automatic sprinkler system riser rooms shall maintain clearances around equipment to elements of permanent construction, including other installed equipment and appliances, and shall be sufficient to allow inspection, service, repair or replacement without removing such elements of permanent construction or disabling the function of a required fire-resistance-rated assembly. Passageways provided for the removal of equipment shall remain unobstructed.

901.4.6.3 Environment. Suitable means shall be provided for maintaining the temperature in automatic sprinkler system riser rooms and fire pump rooms above 40°F (5°C).

901.4.6.4 Lighting. Permanently installed artificial illumination in automatic sprinkler system riser rooms and fire pump rooms shall be maintained in accordance with the applicable building code.

- 9. Delete Section 901.5.1.
- 10. Change Add Section 901.5.2 to read:

901.5.2 Hydrant and fire service main acceptance testing. Fire hydrant systems and private fire service mains shall be subject to acceptance tests as contained in the installation standards and as approved by the fire code official. The fire code official shall be notified before any required acceptance testing.

- 11. Change Section 901.6 to read:
- 901.6 Inspection, testing and maintenance. To the extent that equipment, systems, devices, and safeguards, such as fire detection, alarm and extinguishing systems, which were provided and approved by the building official

when constructed, shall be maintained in an operative condition at all times. And where such equipment, systems, devices, and safeguards are found not to be in an operative condition, the fire official shall order all such equipment to be rendered safe in accordance with the USBC.

- 12. Change Sections 901.7.1 through  $\underline{901.7.6}$  and add Section 901.7.7 to read:
  - 901.7.1 Modifications during impairment. The fire code official is authorized to require safeguards in a building or fire area when the required fire protection is out of service. Those safeguards may be based upon the provisions of the applicable building code or other recognized safety standards.
  - 901.7.2 Impairment coordinator. The building owner shall assign an impairment coordinator to comply with the requirements of this section. In the absence of a specific designee, the owner shall be considered the impairment coordinator.
  - 901.7.3 Tag required. A tag shall be used to indicate that a system or portion thereof has been removed from service.
  - 901.7.4 Placement of tag. The tag shall be posted at each fire department connection, system control valve, fire alarm control unit, fire alarm annunciator and fire command center indicating which system or part thereof has been removed from service. The fire code official shall specify where the tag is to be placed.
  - 901.7.5 Preplanned impairment programs. Preplanned impairments shall be authorized by the impairment coordinator. Before authorization is given, a designated individual shall be responsible for verifying that all of the following procedures have been implemented:
  - 1. The extent and expected duration of the impairment have been determined.
  - 2. The areas or buildings involved have been inspected and the increased risks determined.
  - 3. Recommendations have been submitted to management or the building owner or manager.
  - 4. The fire department has been notified.
  - 5. The insurance carrier, the alarm company, the building owner or manager and other authorities having jurisdiction have been notified.
  - 6. The supervisors in the areas to be affected have been notified.
  - 7. A tag impairment system has been implemented.
  - 8. Necessary tools and materials have been assembled on the impairment site.

- 901.7.6 Emergency impairments. Where unplanned impairments occur, appropriate emergency action shall be taken to minimize potential injury and damage. The impairment coordinator shall implement the steps outlined in Section 901.7.4.
- 901.7.7 Restoring systems to service. When impaired equipment is restored to normal working order, the impairment coordinator shall verify that all of the following procedures have been implemented:
- 1. Necessary inspections and tests have been conducted to verify that affected systems are operational.
- 2. Supervisors have been advised that protection is restored.
- 3. The fire department has been advised that protection is restored.
- 4. The building owner or manager, insurance carrier, alarm company and other involved parties have been advised that protection is restored.
- 5. The impairment tag has been removed.
- 13. Change Section 901.8 to read:
- 901.8 Removal of or tampering with equipment. It shall be unlawful for any person to remove, tamper with, or otherwise disturb any fire hydrant, fire detection and alarm system, fire suppression system, or other fire appliance required by this code or the applicable building code except for the purpose of extinguishing fire, for training purposes, for recharging or making necessary repairs, or where approved by the fire code official.
- 14. Change Section 901.8.2 to read:
- 901.8.2 Removal of existing occupant-use hose lines. The fire code official is authorized to permit the removal of existing occupant-use hose lines where all of the following conditions exist:
- 1. Installation is not required by this code or the applicable building code.
- 2. The hose line would not be utilized by trained personnel or the fire department.
- 3. The remaining outlets are compatible with local fire department fittings.
- 15. Add Section 901.11 to read:
- 901.11 Defective equipment. When the fire official determines through investigation or testing or reports by a nationally recognized testing agency that specific, required water sprinkler or water-spray extinguishing equipment has been identified as failing to perform or operate through not less than 30 randomly selected sprinkler heads at four or more building sites anywhere

in the nation, the fire official shall order all such equipment to be rendered safe.

- B. The following changes shall be made to Section 903, Automatic Sprinkler Systems:
  - 1. Delete Sections 903.1.1 through 903.2.11.1.3, including Tables.
  - 2. Change Section 903.2.11.2 to read:

(N)903.2.11.2 903.2.11.2 Rubbish and linen chutes. Access to automatic sprinkler systems shall be maintained for servicing of the automatic sprinkler system components.

- 3. Delete Sections 903.2.11.3 through 903.2.11.6, including Tables.
- 4. Change Sections 903.2.12 and 903.3 to read:

(N)903.2.12 903.2.12 During construction and demolition. Automatic sprinkler systems required by the applicable building code during construction, alteration and demolition operations shall be maintained in accordance with Chapter 33.

(N)903.3 903.3 Installation requirements. Automatic sprinkler systems shall be maintained in accordance with the applicable building code.

- 5. Delete Sections 903.3.1 through 903.3.5.2.
- 6. Change Sections Section 903.3.6 to read:

(N)903.3.6 903.3.6 Hose threads. Fire hose threads and fittings used in connection with automatic sprinkler systems shall be maintained as approved by the fire code official.

- 7. Delete Sections 903.3.7 through 903.3.8.4.
- 8. Change Sections Section 903.3.8.5 to read:

(N)903.3.8.5 903.3.8.5 Calculations. When required by inspections, testing, and maintenance provisions of NFPA 25, hydraulic calculations shall be provided to demonstrate that the available water flow and pressure are adequate to supply all sprinklers installed in any single fire area with discharge densities corresponding to the hazard classification.

- 9. Delete Sections 903.4 through 903.4.3.
- 10. Change Section 903.6 to read:

903.6 Where required in existing buildings and structures. An automatic sprinkler system shall be provided in existing buildings and structures in accordance with Section 102.7 of this code.

C. The following changes shall be made to Section 904, Alternative Automatic Fire-Extinguishing Systems:

1. Change Sections 904.1 and 904.1.1 to read:

(N)904.1 904.1 General. Automatic fire-extinguishing systems, other than automatic sprinkler systems, shall be inspected, tested and maintained in accordance with the provisions of this section and the applicable referenced standards.

904.1.1 Certification of service personnel for fire-extinguishing equipment. Service personnel providing or conducting maintenance on automatic fire-extinguishing systems, other than automatic sprinkler systems, shall possess a valid certificate issued by an approved agency or other approved organization for the type of system and work performed.

- 2. Delete Section Sections 904.2 and 904.2.1.
- 3. Change Sections 904.2.2 and 904.3 to read:

(N)904.2.2 904.2.2 Commercial hood and duct systems. Each required commercial kitchen exhaust hood and duct system required by Section 319.4 for mobile food preparation vehicles to have a Type I hood shall be protected with an approved automatic fire-extinguishing system installed in accordance with this code.

(N)904.3 904.3 Installation. Automatic fire-extinguishing systems shall be installed in accordance with Annex B of NFPA 96 when required in mobile food preparation vehicles.

- 4. Delete Sections 904.3.1 through 904.4.3.
- 5. Change Section 904.5 to read:

904.5 Wet-chemical systems. Wet-chemical extinguishing systems shall be maintained, periodically inspected and tested in accordance with NFPA 17A and their listing. Records of inspections and testing shall be maintained.

6. Change Section 904.6 to read:

904.6 Dry-chemical systems. Dry-chemical extinguishing systems shall be maintained, periodically inspected and tested in accordance with NFPA 17 and their listing. Records of inspections and testing shall be maintained.

7. Change Section 904.7 to read:

904.7 Foam systems. Foam-extinguishing systems shall be maintained, periodically inspected and tested in accordance with NFPA 11 and NFPA 16 and their listing. Records of inspections and testing shall be maintained.

8. Change Section 904.8 to read:

904.8 Carbon dioxide systems. Carbon dioxide extinguishing systems shall be maintained, periodically inspected and tested in accordance with NFPA 12 and their listing. Records of inspections and testing shall be maintained.

## 9. Change Section 904.9 to read:

904.9 Halon systems. Halogenated extinguishing systems shall be maintained, periodically inspected and tested in accordance with NFPA 12A and their listing. Records of inspections and testing shall be maintained.

# 10. Change Section 904.10 to read:

904.10 Clean-agent systems. Clean-agent fire-extinguishing systems shall be maintained, periodically inspected and tested in accordance with NFPA 2001 and their listing. Records of inspections and testing shall be maintained.

#### 11. Change Section 904.11 to read:

(N)904.11 904.11 Automatic water mist systems. Automatic water mist systems shall be maintained in accordance with NFPA 25 and the manufacturer's instructions.

- 12. Delete Sections 904.11.1.1 through 904.11.2.3.
- 13. Change Sections 904.12 through 904.12.2 to read:

(N)904.12 904.12 Commercial cooking systems. Automatic fire-extinguishing systems for commercial cooking shall comply with this section.

(N)904.12.1 904.12.1 Manual system operation. Where provided, manual actuation devices shall be maintained as installed in accordance with the applicable building code and shall not be obstructed.

(N)904.12.2 904.12.2 System interconnection. Where required by the applicable building code, the actuation of the fire extinguishing system shall automatically shut down the fuel or electrical power supply to the cooking equipment. The fuel and electrical supply reset shall be manual.

- 14. Delete Sections 904.12.3 through 904.12.4.
- 15. Change Sections Section 904.12.4.1 to read:

(N)904.12.4.1 904.12.4.1 Listed sprinklers. Sprinklers replaced in accordance with NFPA 25, which are used for the protection of fryers, shall be tested in accordance with UL 199E, listed for that application, and installed in accordance with their listing.

# 16. Change Section 904.12.6.1 904.12.5.1 to read:

(N)904.12.6.1 904.12.5.1 Existing automatic fire-extinguishing systems. Where a change in the cooking media, positioning of cooking equipment, or replacement of cooking equipment occurs in existing commercial cooking systems, the automatic fire-extinguishing system shall be required to comply with the applicable building code

17. Delete Sections 904.13 through <del>904.13.2</del> <u>904.13.1.2</u>.

#### 18. Change Section 904.14 to read:

904.14 Aerosol fire-extinguishing systems. Aerosol fire-extinguishing systems shall be periodically inspected, tested and maintained in accordance with Section 901 and NFPA 2010 and in accordance with their listing.

- D. The following changes shall be made to Section 905, Standpipe Systems:
  - 1. Change Sections 905.1 and 905.2 to read:

(N)905.1 905.1 General. Standpipe systems shall be inspected, tested and maintained in accordance with the provisions of this section and the applicable referenced standards.

(N)905.2 905.2 Maintenance standard. Standpipe systems shall be maintained in accordance with this section and NFPA 14. Fire department connections for standpipe systems shall be in accordance with Section 912.

- 2. Delete Sections 905.3 through 905.3.4.
- 3. Change Sections Section 905.3.4.1 to read:

(N)905.3.4.1 905.3.4.1 Hose and cabinet. Where required by the applicable building code, hose connections shall be equipped with sufficient lengths of 1-1/2-inch (38 mm) hose to provide fire protection for the required area. Hoses shall be equipped with an approved adjustable fog nozzle and be mounted in a cabinet or on a rack.

- 4. Delete Sections 905.3.5 and 905.3.6.
- 5. Change Section 905.3.7 to read:

(N)905.3.7 905.3.7 Marinas and boatyards. Standpipes in marinas and boatyards shall comply with Chapter 36.

- 6. Delete Sections 905.3.8 through 905.5.2.
- 7. Change Section 905.5.3 to read:

(N)905.5.3 905.5.3 Class II system 1-inch hose. A minimum 1-inch (25 mm) hose shall be allowed to be used for hose stations in light-hazard occupancies where investigated and listed for this service and where approved by the fire code official.

- 8. Delete Sections 905.6 through 905.6.2.
- 9. Change Sections 905.7 through 905.7.2 to read:

(N)905.7 905.7 Cabinets. Cabinets containing firefighting equipment, such as standpipes, fire hose, fire extinguishers or fire department valves, shall not be blocked from use or obscured from view.

(N)905.7.1 905.7.1 Cabinet equipment identification. Cabinets shall be identified in an approved manner by a permanently attached sign with letters not less than 2 inches (51 mm) high in a color that contrasts with the

background color indicating the equipment contained therein.

# **Exceptions:**

- 1. Doors not large enough to accommodate a written sign shall be marked with a permanently attached pictogram of the equipment contained therein.
- 2. Doors that have either an approved visual identification clear glass panel or a complete glass door panel are not required to be marked.

(N)905.7.2 905.7.2 Locking cabinet doors. Cabinets shall be unlocked.

#### **Exceptions:**

- 1. Visual identification panels of glass or other approved transparent frangible material that is easily broken and allows access.
- 2. Approved locking arrangements.
- 3. Group I-3 occupancies.
- 10. Delete Sections 905.8 and 905.9.
- 11. Change Section 905.10 to read:

(N)905.10 905.10 During construction. Standpipe systems required during construction and demolition operations shall comply with Chapter 33.

- 12. Delete Section Sections 905.11 and 905.12.
- E. The following changes shall be made to Section 906, Portable Fire Extinguishers:
  - 1. Change Item 1 in Section 906.1 to read:
    - 1. In Group Groups A, B, E, F, H, I, M, R-1, R-4, and S occupancies.

# **Exceptions:**

- 1. In Groups A, B, and E occupancies equipped throughout with quick response sprinklers, portable fire extinguishers shall be required only in locations specified in Items 2 through 6.
- 2. In Group I-3 occupancies, portable fire extinguishers shall be permitted to be located at staff locations and the access to such extinguishers shall be permitted to be locked.
- 2. Add a note to Section 906.1 to read:

Note: In existing buildings, whether fire extinguishers are needed is determined by the USBC or other code in effect when such buildings were constructed.

3. Change Section 906.2.1 to read:

906.2.1 Certification of service personnel for portable fire extinguishers. Service personnel providing or

- conducting maintenance on portable fire extinguishers shall possess a valid certificate issued by an approved agency, or other approved organization for the type of work performed.
- F. The following changes shall be made to Section 907, Fire Alarm and Detection Systems:
  - 1. Change Section 907.1 to read:
    - 907.1 General. This section covers the performance and maintenance of fire alarm systems and their components in buildings and structures.
  - 2. Delete Sections 907.1.1 and 907.1.2.
  - 3. Change Section 907.1.3 to read:

(N)907.1.3 <u>907.1.3</u> Equipment. Systems and components not regulated by the applicable building code shall be listed and approved for the purpose for which they are installed.

- 4. Delete Sections 907.2 through 907.2.6.3.2.
- 5. Delete Sections 907.2.6.3.3 through 907.2.10.3 907.2.9.3.
- 6. Change Section 907.2.11 907.2.10 to read:

(N)907.2.11 907.2.10 Single-station and multiple-station smoke alarms. Alarms not required by the applicable building code shall be listed single-station and multiple-station smoke alarms complying with UL 217 and installed in accordance with the manufacturer's instructions and NFPA 72.

- 7. Delete Sections 907.2.11.1 907.2.10.1 through 907.3.1.
- 8. Change Sections 907.3.2 and 907.3.3 to read:

(N)907.3.2 Delayed egress locks 907.3.2 Special locking systems. Where delayed egress locks special locking systems are installed on means of egress doors, they shall be maintained as installed in accordance with the applicable building code.

(N)907.3.3 907.3.3 Elevator emergency operation. Automatic fire detectors installed for elevator emergency operation shall be maintained as provided by the applicable building code.

- 9. Delete Sections 907.3.4 through 907.4.1.
- 10. Change Section 907.4.2 to read:

(N)907.4.2 907.4.2 Manual fire alarm boxes. Manual fire alarm boxes or pull stations shall be maintained as provided in accordance with the applicable building code.

11. Delete Sections 907.4.2.1 and 907.4.2.2.

12. Change Sections 907.4.2.3 and 907.4.2.5 to read:

(N)907.4.2.3 907.4.2.3 Color. Manual fire alarm boxes shall be maintained as installed unless otherwise approved.

907.4.2.5 Protective covers. The fire code official is authorized to require the installation of listed manual fire alarm box protective covers to prevent malicious false alarms or to provide the manual fire alarm box with protection from physical damage. The protective cover shall be transparent or red in color with a transparent face to permit visibility of the manual fire alarm box. Each cover shall include proper operating instructions. A protective cover that emits a local alarm signal shall not be installed unless approved. Protective covers shall not reduce the required means of egress width.

- 13. Delete Sections 907.4.3 through 907.5.
- 14. Change Section 907.5.1 to read:

(N)907.5.1 907.5.1 Presignal feature. A presignal feature shall not be utilized unless approved by the fire code official and the fire department. Where a presignal feature is provided, a signal shall be annunciated at a constantly attended location approved by the fire department so that occupant notification can be activated in the event of fire or other emergency.

- 15. Delete Sections 907.5.2 through 907.5.2.2.3.
- 16. Change Section 907.5.2.2.4 to read:

(N)907.5.2.2.4 907.5.2.2.4 Emergency voice or alarm communication captions. Where stadiums, arenas and grandstands are required to caption audible public announcements in accordance with of the applicable building code, the emergency or voice alarm communication system shall be captioned. Prerecorded or live emergency captions shall be from an approved location constantly attended by personnel trained to respond to an emergency.

- 17. Delete Sections 907.5.2.2.5 through 907.6.2.
- 18. Change Section 907.6.3 to read:

(N)907.6.3 907.6.3 Initiating device identification. The fire alarm systems that identify the specific initiating device address, location, device type, floor level where applicable, and status, including indication of normal, alarm, trouble and supervisory status, shall be maintained as provided in accordance with the applicable building code.

19. Delete Sections 907.6.3.1 through 907.6.4.2.

20. Change Sections 907.6.5 through 907.6.6 to read:

(N)907.6.5 907.6.5 Access. Access to each fire alarm device and notification appliance for periodic inspection, maintenance and testing shall not be obstructed.

(N)907.6.6 907.6.6 Monitoring. The monitoring of fire alarm systems required by the applicable building code shall be maintained in accordance with NFPA 72.

- 21. Delete Sections 907.7 through 907.7.2.
- 22. Change Section 907.7.3 to read:

907.7.3 Instructions. Operating, testing and maintenance instructions and existing record drawings ("as builts") and equipment specifications shall be provided at an approved location.

23. Change Section 907.8.2 to read:

907.8.2 Testing. Testing shall be performed in accordance with the schedules in Chapter 10 of NFPA 72 or more frequently where required by the fire code official. Where automatic testing is performed at least weekly by a remotely monitored fire alarm control unit specifically listed for the application, the manual testing frequency shall be permitted to be extended to annual. In Group R-1 occupancies, battery-powered single station smoke detectors shall be tested and inspected at one-month intervals.

Exception: Devices or equipment that are inaccessible for safety considerations shall be tested during scheduled shutdowns where approved by the fire code official, but not less than every 18 months.

24. Change Section 907.8.5 to read:

907.8.5 Maintenance, inspection and testing. The building owner shall be responsible for maintaining the fire and life safety systems in an operable condition at all times. Service personnel shall meet the qualification requirements of NFPA 72 for maintaining, inspecting and testing such systems. A written record shall be maintained and shall be made available to the fire code official. In addition to all applicable information contained in Figure 7.8.2 of NFPA 72, the written record of inspections, testing and maintenance shall contain the following minimum information:

- 1. Date, name and address of property.
- 2. Name of person performing inspection, maintenance and tests, or combination thereof, and affiliation, business address and telephone number.
- 3. Name, address and representative of approving agency or agencies.
- 4. Test frequency.

- 5. Designation of the detector <del>or detectors</del> tested (for example, "Test performed in accordance with Section .").
- 6. Physical location (for example, "Heat detector in main kitchen; horn-strobe in Room 115.") and a list of all initiating and notification devices and appliances tested.
- 7. Functional list of detectors and required sequence of operations.
- 8. Check of all smoke detectors.
- 9. Loop resistance for all fixed-temperature, line-type detectors.
- 10. Other tests as required by either the equipment manufacturer's published instructions or the authority having jurisdiction.
- 11. Signature of tester and approved authority representative.
- 12. Disposition of problems identified during test (examples, "Owner notified," "Problem corrected or successfully retested, or both," "Device abandoned in place.").
- 25. Delete Section 907.9.
- G. The following changes shall be made to Section 908, Emergency Alarm Systems:

Change Sections 908.1 through 908.7 and 908.2 to read:

908.1 Group H occupancies. Emergency alarms for the detection and notification of an emergency condition in Group H occupancies shall be maintained as provided in accordance with the applicable building code.

(N)908.2 908.2 Group H-5 occupancy. Emergency alarms for notification of an emergency condition in a hazardous production material (HPM) facility shall be maintained as provided in accordance with the applicable building code. Continuous gas detection systems shall be maintained for HPM gases as provided in accordance with the applicable building code.

(N)908.3 Highly toxic and toxic materials. Where required by the applicable building code for highly toxic and toxic materials, gas detection systems shall be maintained.

(N)908.4 Ozone gas generator rooms. Where required by the applicable building code, gas detection systems provided in ozone gas generator rooms shall be maintained.

(N)908.5 Repair garages. A flammable-gas detection system provided in accordance with the applicable building code in repair garages for vehicles fueled by nonodorized gases shall be maintained.

(N)908.6 Refrigeration systems. Refrigeration system machinery rooms provided with refrigerant detection in accordance with the applicable building code shall be maintained.

908.7 Carbon dioxide systems. Emergency alarm systems provided in accordance with the applicable building code shall be maintained.

- H. The following changes shall be made to Section 909, Smoke Control Systems:
  - 1. Change Section 909.1 to read:

(N)909.1 909.1 Scope and purpose. This section applies to the inspection, testing, and maintenance of mechanical or passive smoke control systems. The purpose of these systems to provide a tenable environment for the evacuation or relocation of occupants. These provisions are not intended for the preservation of contents, the timely restoration of operations, or for assistance in fire suppression or overhaul activities.

- 2. Delete Sections 909.2 through 909.4.5.
- 3. Change Section 909.4.6 to read:

(N)909.4.6 909.4.6 Duration of operation. All portions of active or engineered smoke control systems shall be capable of continued operation after detection of the fire event for a period of not less than that required by the applicable building code.

- 4. Delete Section 909.4.7.
- 5. Change Section 909.5 to read:

(N)909.5 909.5 Smoke barriers. Smoke barriers required for passive smoke control and smoke control systems using the pressurization method shall be maintained in accordance with Chapter 7 of this code.

- Delete Sections 909.5.1 and 909.5.2.
- 7. Change Section 909.5.3 to read:

(N)909.5.3 909.5.3 Opening protection. Protection of openings in smoke barriers shall be maintained in accordance with Chapter 7.

- 8. Delete Section 909.5.3.1.
- 9. Change Section 909.5.3.2 to read:

(N)909.5.3.2 909.5.3.2 Ducts and air transfer openings. Protection of ducts and air transfer openings shall be maintained in accordance with Chapter 7.

- 10. Delete Sections 909.6 through 909.10.4.
- 11. Change Sections 909.10.5 through 909.11.1 to read:

(N)909.10.5 909.10.5 Fans. Motors driving fans associated with smoke control systems shall not be operated beyond their nameplate horsepower (kilowatts)

as determined from measurement of actual current draw and shall have a minimum service factor of 1.15.

(N)909.11 909.11 Standby power. Standby power provided for smoke control systems shall be maintained in accordance with Section 604 1203.

(N)909.11.1 909.11.1 Equipment room. Fire barriers associated with equipment rooms servicing smoke control systems shall be maintained in accordance with Chapter 7.

- 12. Delete Sections 909.11.2 through 909.13.3.
- 13. Change Sections 909.14 and 909.15 to read:

909.14 Marking and identification. The detection and control systems shall be clearly marked at all junctions, accesses and terminations.

909.15 Control diagrams. Identical control diagrams showing all devices in the system and identifying their location and function shall be maintained current and kept on file with the fire code official, with the fire department, and in the fire command center in a format and manner approved by the fire chief.

- 14. Delete Sections 909.16 and 909.16.1.
- 15. Change Section 909.16.2 to read:

(N)909.16.2 909.16.2 Smoke control panel. The firefighter's control panel shall maintain control capability over the complete smoke control system equipment within the building in accordance with the applicable building code.

- 16. Delete Section 909.16.3.
- 17. Change Sections Section 909.17 and 909.18 to read:

(N)909.17 909.17 System response time. Smoke-control system activation, including all associated components, shall be initiated in accordance with its design. The total response time shall not be less than the requirements specified in the design.

#### (N)909.18 Acceptance testing.

- 18. Delete Sections 909.18.1 909.18 through 909.18.8.3.
- 19. Change Sections 909.18.8.3.1 and 909.18.9 to read:

(N)909.18.8.3.1 909.18.8.3.1 Report filing. A copy of the final report required by the applicable building code shall be filed with the fire code official and an identical copy shall be maintained in an approved location at the building.

(N)909.18.9 909.18.9 Identification and documentation. Copies of charts, drawings, and other documents identifying and locating each component of the smoke control system and describing their proper function and maintenance requirements shall be maintained on file at

the building. Devices shall have an approved identifying tag or mark on them consistent with such copies and shall be dated indicating the last time they were successfully tested and by whom.

- 20. Delete Section 909.19.
- 21. Change Sections 909.20.1, 909.20.6, and 909.21 to read:

909.20.1 Schedule. A routine maintenance and operational testing program shall be initiated immediately after the smoke control system has passed the acceptance tests. A written schedule for routine maintenance and operational testing shall be established and approved by the fire code official in accordance with Chapter 9 of the applicable building code.

(N)909.20.6 909.20.6 Components bypassing weekly test. Where components of the smoke control system are bypassed by the preprogrammed weekly test in accordance with the applicable building code, such components shall be tested semiannually. The system shall be tested under standby power conditions.

(N)909.21 909.21 Elevator hoistway pressurization alternative. Where elevator hoistway pressurization is provided in lieu of required enclosed elevator lobbies, the pressurization system shall be maintained in accordance with Section 909.

- 22. Delete Sections 909.21.1 through 909.21.2.
- 23. Change Sections 909.21.3 through 909.21.4.1 to read:

(N)909.21.3 909.21.3 Ducts for system. Any duct system protected with a fire-resistance rating shall be maintained in accordance with Chapter 7.

(N)909.21.4 909.21.4 Fan system. The fan system provided for the pressurization system shall comply with Sections 909.21.4.1.

(N)909.21.4.1 909.21.4.1 Fire resistance. Where provided in accordance with the applicable building code, the fire-resistance rating required for the elevator shaft enclosure shall be maintained in accordance with Chapter 7.

- 24. Delete Sections 909.21.4.2 through 909.21.4.4.
- 25. Change Section 909.21.5 to read:

(N)909.21.5 909.21.5 Standby power. Standby power systems for pressurization systems shall be maintained in accordance with Section 604 1203.

- 26. Delete Sections 909.21.6 and 909.21.7.
- 27. Change Sections 909.21.8 and 909.21.9 to read:

(N)909.21.8 909.21.8 Marking and identification. Detection and control systems shall be marked in accordance with Section 909.14.

(N)909.21.9 909.21.9 Control diagrams. Control diagrams shall be provided in accordance with Section 909.15.

- 28. Delete Section 909.21.10.
- 29. Change Section 909.21.11 to read:

(N)909.21.11 909.21.11 System response time. Hoistway pressurization systems response time shall be maintained in accordance with the requirements for smoke control system response time in the applicable building code.

- I. The following changes shall be made to Section 910, Smoke and Heat Removal:
  - 1. Change Section 910.1 to read:

(N)910.1 910.1 General. Where required by the applicable building code, smoke and heat vents or mechanical smoke removal systems shall be maintained as installed.

- 2. Delete Sections 910.2 through 910.3.3.
- 3. Change Section 910.4 to read:

(N)910.4 910.4 Mechanical smoke removal systems. Mechanical smoke removal systems provided shall be maintained as installed in accordance with the applicable building code.

- 4. Delete Sections 910.4.1 through 910.4.7.
- J. The following changes shall be made to Section 911, Explosion Control:
  - 1. Change Section 911.1 to read:

(N)911.1 911.1 General. Explosion control systems and components shall be maintained and operated in accordance with NFPA 69, or NFPA 495, as applicable. Deflagration venting shall not be used as a means to protect buildings from detonation hazards.

- 2. Delete Table 911.1 and Sections 911.2 through 911.4.
- K. The following changes shall be made to Section 912, Fire Department Connections:
  - 1. Delete Sections 912.1 through 912.2.1.
  - 2. Change Section 912.6 to read:

(N)912.6 912.6 Backflow protection. The potable water supply to automatic sprinkler and standpipe systems protected against backflow as required by the applicable building code shall be maintained in accordance with NFPA 25.

- L. The following changes shall be made to Section 913, Fire Pumps:
  - 1. Change Sections 913.1 through 913.2.1 to read:

(N)913.1 913.1 General. Where provided, fire pumps shall be maintained in accordance with the applicable building code.

(N)913.2 913.2 Protection against interruption of service. The fire pump, driver and controller shall be maintained in accordance with the applicable building code.

(N)913.2.1 913.2.1 Protection of fire pump rooms. Rooms where fire pumps are separated from all other areas of the building by a fire-rated assembly in accordance with the applicable building code shall be maintained in accordance with Chapter 7.

- 2. Delete Section 913.2.2.
- 3. Change Sections 913.3 and 913.4 to read:

(N)913.3 913.3 Temperature of pump room. Suitable means shall be provided for maintaining the temperature of a pump room or pump house above  $40^{\circ}$ F ( $5^{\circ}$ C).

(N)913.4 913.4 Valve supervision. Where provided, the fire pump suction, discharge and bypass valves, and isolation valves on the backflow prevention device or assembly shall be maintained in accordance with the applicable building code.

- 4. Delete Section 913.5.1.
- M. The following changes shall be made to Section 914, Fire Protection Based on Special Detailed Requirements of Use and Occupancy:
  - 1. Delete Sections 914.1 through 914.2.3.
  - 2. Change Section 914.2.4 to read:
  - 914.2.4 Fire department access to equipment. Rooms or areas containing controls for air-conditioning systems, automatic fire-extinguishing systems, automatic sprinkler systems, or other detection, suppression, or control elements shall be identified for use by the fire department.
  - 3. Delete Sections 914.3 through 914.11.3, including Tables.
- N. The following changes shall be made to Section 915, Carbon Monoxide Detection:
  - 1. Change Section 915.1 to read:

(N)915.1 915.1 General. Where provided, carbon monoxide detection shall be installed in accordance with the applicable building code.

2. Delete Sections 915.1.1 through 915.5.3.

#### 3. Change Section 915.6 to read:

915.6 Maintenance. Carbon monoxide alarms and carbon monoxide detection systems shall be maintained in accordance with NFPA 720. Carbon monoxide alarms and carbon monoxide detectors that become inoperable or begin producing end of life signals shall be replaced.

- O. The following changes shall be made to Section 916, Gas Detection Systems:
  - 1. Change Section 916.1 to read:
    - 916.1 Gas detection systems. Gas detection systems shall be maintained in accordance with the applicable building code.
  - 2. Delete Sections 916.2 through 917.

## 13VAC5-51-135.5. IFC Chapter 10 Means of Egress.

A. The following changes shall be made to Section 1001, Administration:

1. Change Section 1001.1 to read:

1001.1 General. Means of egress systems for buildings or portions thereof shall be maintained in accordance with the applicable building code and Section 1031.

2. Add Section 1001.3 to read:

1001.3 Overcrowding. Overcrowding, admittance of any person beyond the approved occupant load established by the USBC or other building code under which the building was constructed, or obstructing aisles, passageways, or any part of the means of egress shall not be allowed. The fire code official, upon finding any condition that constitutes a life safety hazard, shall be authorized to cause the event to be stopped until such condition or obstruction is corrected.

#### 3. Add Section 1001.4 to read:

1001.4 Unauthorized use of emergency supplemental hardware. No person shall utilize any approved emergency supplemental hardware to prevent the ingress or egress from any occupied space.

## **Exceptions:**

- 1. Utilized by authorized persons or other persons occupying such space in the event of any actual or perceived hostile threat or active shooter event.
- 2. Utilized in conjunction with any approved lockdown drill requiring the utilization of the approved emergency supplemental hardware.
- 3. Utilization for the testing, use, and training by emergency response personnel.

Where such device is utilized in accordance with the Exceptions 1, 2, and 3, the hardware device shall be

- removed immediately following the conditions of such exceptions.
- B. The following changes shall be made to Section 1003, General Means of Egress:
  - 1. Change Section 1003.1 to read:

(N)1003.1 1003.1 Applicability. The general requirements specified in Sections 1003 through 1015 shall apply to the maintenance of the building.

2. Change Section 1003.2 to read:

(N)1003.2 1003.2 Ceiling height. The means of egress ceiling height shall be maintained in accordance with the applicable building code.

3. Change Section 1003.3 to read:

1003.3 Protruding objects. Protruding objects on circulation paths shall comply with the requirements of Sections 1003.3.1 and 1003.3.4.

4. Change Section 1003.3.1 to read:

(N)1003.3.1 1003.3.1 Headroom. Minimum headroom shall be maintained in accordance with the applicable building code.

- 5. Delete Section 1003.3.2.
- 6. Delete Section 1003.3.3.
- 7. Change Section 1003.3.4 to read:

(N)1003.3.4 1003.3.4 Clear width. Protruding objects shall not reduce the minimum clear width of accessible routes.

8. Change Section 1003.4 to read:

(N)1003.4 1003.4 Floor surface. Slip and trip hazards in the means of egress shall be abated.

- 9. Delete Section 1003.5.
- 10. Change Section 1003.6 to read:

(N)1003.6 1003.6 Means of egress continuity. Means of egress continuity shall be maintained in accordance with the applicable building code.

- 11. Delete Section 1003.7.
- C. The following changes shall be made to Section 1004, Occupant Load:
  - 1. Change Section 1004.1 to read:

(N)1004.1 1004.1 Design occupant load. The design occupant load shall be maintained in accordance with the applicable building code.

2. Delete Section 1004.1.1 Sections 1004.2 through 1004.3, 1004.5, 1004.5.1, and 1004.6, including Table 1004.5.

3. Delete Section 1004.1.1.1. Change Sections 1004.4 and 1004.7 to read:

1004.4 Multiple occupancies. Where a building contains two or more occupancies, the means of egress requirements shall be maintained in accordance with the applicable building code.

1004.7 Outdoor areas. The means of egress for outdoor areas shall be maintained in accordance with the applicable building code.

- 4. Delete Section 1004.1.1.2 1004.8.
- 5. Delete Section 1004.1.1.3.
- 6. Delete Section 1004.1.2 and Table 1004.1.2.
- 7. Delete Section 1004.2.
- 8. <u>5.</u> Change Section <u>1004.3</u> <u>1004.9</u> to read:

(N)1004.3 1004.9 Posting of occupant load. Every room or space that is an assembly occupancy and where the occupant load of that room or space is 50 or more shall have the occupant load of the room or space posted in a conspicuous place near the main exit or exit access doorway from the room or space. Posted signs shall be of an approved legible permanent design and shall be maintained by the owner or the owner's authorized agent.

- 9. Delete Section 1004.4.
- 10. Change Section 1004.5 to read:

(N)1004.5 Outdoor areas. The means of egress for outdoor areas shall be maintained in accordance with the applicable building code.

11. Change Section 1004.6 to read:

(N)1004.6 Multiple occupancies. Where a building contains two or more occupancies, the means of egress requirements shall be maintained in accordance with the applicable building code.

- D. The following changes shall be made to Section 1005, Means of Egress Sizing:
  - 1. Change Section 1005.1 to read:

(N)1005.1 1005.1 General. All portions of the means of egress system shall be sized in accordance with the applicable building code.

2. Change Section 1005.2 to read:

(N)1005.2 1005.2 Minimum width based on component. The minimum width of any means of egress components shall be maintained in accordance with the applicable building code.

3. Change Section 1005.3 to read:

(N)1005.3 1005.3 Required capacity based on occupant load. The required capacity of the means of egress for any room, area, space or story shall be maintained in accordance with the applicable building code.

4. Change Section 1005.3.1 to read:

(N)1005.3.1 1005.3.1 Stairways. The capacity, in inches, of means of egress stairways shall be maintained in accordance with the applicable building code.

- 5. Delete Section 1005.3.2.
- 6. Change Section 1005.4 to read:

(N)1005.4 1005.4 Continuity. The minimum width or required capacity of the means of egress required from any story of a building shall be maintained in accordance with the applicable building code.

- 7. Delete Section 1005.5.
- 8. Change Section 1005.6 to read:

(N)1005.6 1005.6 Egress convergence. Where the means of egress from stories above and below converge at an intermediate level, the capacity of the means of egress from the point of convergence shall be maintained in accordance with the applicable code.

9. Change Section 1005.7 to read:

(N)1005.7 1005.7 Encroachment. Encroachments into the required means of egress width shall be in accordance with the provisions of the applicable building code.

- 10. Delete Section 1005.7.1.
- 11. Delete Section 1005.7.2.
- 12. Delete Section 1005.7.3.
- E. The following changes shall be made to Section 1006, Numbers of Exits and Exit Access Doorways:
  - 1. Change Section 1006.1 to read:

(N)1006.1 1006.1 General. The number of exits or exit access doorways required within the means of egress system shall be maintained in accordance with the applicable building code.

2. Change Section 1006.2 to read:

(N)1006.2 1006.2 Egress from spaces. Egress from spaces shall be maintained in accordance with the applicable building code.

- 3. Delete <u>Section Sections</u> 1006.2.1 <u>through 1006.2.6, including subsections,</u> and Table 1006.2.1.
- 4. Delete Section 1006.2.1.1.
- 5. Delete Section 1006.2.2.

- 6. Delete Section 1006.2.2.1.
- 7. Delete Section 1006.2.2.2.
- 8. Delete Section 1006.2.2.3.
- 9. Delete Section 1006.2.2.4.
- 10. Delete Section 1006.2.2.5.
- 11. 4. Change Section 1006.3 to read:

(N)1006.3 1006.3 Egress from stories or occupied roofs. The means of egress system serving any story or occupied roof shall be maintained in accordance with the applicable building code.

- <u>12.</u> <u>5.</u> Delete <u>Section Sections 1006.3.1 through 1006.3.3.1, including subsections, and <u>Table 1006.3.1 tables.</u></u>
- 13. Delete Section 1006.3.2 and Tables 1006.3.2(1) and 1006.3.2(2).
- 14. Delete Section 1006.3.2.1.
- 15. Delete Section 1006.3.2.2.
- F. The following changes shall be made to Section 1007, Exit and Exit Access Doorway Configuration:
  - 1. Change Section 1007.1 to read:

(N)1007.1 1007.1 General. Exits, exit access doorways, and exit access stairways and ramps serving spaces, including individual building stories, shall be maintained in accordance with the applicable code.

- 2. Delete Section 1007.1.1.
- 3. Delete Section 1007.1.1.1.
- 4. Delete Section 1007.1.2.
- 5. Delete Section 1007.1.3.
- 6. Delete Section 1007.1.3.1.
- G. The following changes shall be made to Section 1008, Means of Egress Illumination:
  - 1. Change Section 1008.1 to read:

(N)1008.1 1008.1 Means of egress illumination. Illumination provided in the means of egress shall be maintained in accordance with the applicable code.

2. Change Section 1008.2 to read:

(N)1008.2 1008.2 Illumination required. Illumination provided for the means of egress serving a room or space shall be maintained in accordance with the applicable building code.

- 3. Delete Section 1008.2.1.
- 4. Delete Section Sections 1008.2.2 and 1008.2.3.

5. Change Section 1008.3 to read:

(N)1008.3 1008.3 Emergency power for illumination. The power supply for means of egress illumination shall be maintained in accordance with the applicable building code.

- 6. Delete Section Sections 1008.3.1 through 1008.3.5.
- 7. Delete Section 1008.3.2.
- 8. Delete Section 1008.3.3.
- 9. Delete Section 1008.3.4.
- 10. Delete Section 1008.3.5.
- H. The following changes shall be made to Section 1009, Accessible Means of Egress:
  - 1. Change Section 1009.1 to read:

(N)1009.1 1009.1 Accessible means of egress required. Accessible means of egress shall be maintained in accordance with the applicable building code.

2. Change Section 1009.2 to read:

(N)1009.2 1009.2 Continuity and components. Continuity and components provided for accessible means of egress shall be maintained in accordance with the applicable building code.

- 3. Delete Section 1009.2.1.
- 4. Change Section 1009.3 <u>and delete Sections 1009.3.1, 1009.3.2, and 1009.3.3</u>.

Section 1009.3 to read:

(N)1009.3 1009.3 Stairways. Stairways part of an accessible means of egress shall be maintained in accordance with the applicable building code.

5. Change Section 1009.4 <u>and delete Sections 1009.4.1 and 1009.4.2.</u>

Section 1009.4 to read:

(N)1009.4 1009.4 Elevators. Elevators considered part of the means of egress shall be maintained in accordance with the applicable building code.

6. Change Section 1009.5 to read:

(N)1009.5 1009.5 Platform lifts. Platform lifts serving as a part of an accessible means of egress shall be maintained in accordance with the applicable building code.

7. Change Section 1009.6 to read:

(N)1009.6 1009.6 Areas of refuge. Areas of refuge shall be maintained in accordance with the applicable building code.

8. Delete Section Sections 1009.6.1 through 1009.6.5.

- 9. Delete Section 1009.6.2.
- 10. Delete Section 1009.6.3.
- 11. Delete Section 1009.6.4.
- 12. Delete Section 1009.6.5.
- 13. 9. Change Section 1009.7 to read:

(N)1009.7 1009.7 Exterior areas for assisted rescue. Exterior areas for assisted rescue shall be maintained in accordance with the applicable building code.

- 14. 10. Delete Section Sections 1009.7.1 through 1009.7.4.
- 15. Delete Section 1009.7.2.
- 16. Delete Section 1009.7.3.
- 17. Delete Section 1009.7.4.
- 18. 11. Change Section 1009.8 to read:

(N)1009.8 1009.8 Two-way communication. Where provided, two-way communication systems shall be maintained in accordance with the applicable building code.

- 19. 12. Delete Section 1009.8.1.
- I. The following changes shall be made to Section 1010, Doors, Gates and Turnstiles:
  - 1. Change Section 1010.1 to read:

(N)1010.1 1010.1 Doors. Doors serving a means of egress system shall be maintained in accordance with the applicable building code. Means of egress doors shall be readily distinguishable from the adjacent construction and finishes such that the doors are easily recognizable as doors. Mirrors or similar reflecting materials shall not be used on means of egress doors. Means of egress doors shall not be concealed by curtains, drapes, decorations or similar materials.

- 2. Delete Section Sections 1010.1.1 through 1010.1.4.3 and 1010.1.5 through 1010.1.8, including subsections, and Tables 1010.1.4.1(1) and 1010.1.4.1(2).
- 3. Delete Section 1010.1.1.1.
- 4. Delete Section 1010.1.2.
- 5. Delete Section 1010.1.2.1.
- 6. Delete Section 1010.1.3.
- 7. Delete Section 1010.1.3.1.
- 8. Delete Section 1010.1.4.
- 9. Delete Section 1010.1.4.1 and Tables 1010.1.4.1(1) and 1010.1.4.1(2).
- 10. Delete Section 1010.1.4.1.1.

- 11. Delete Section 1010.1.4.1.2.
- 12. Delete Section 1010.1.4.2.
- 13. Delete Section 1010.1.4.3.
- 14. Delete Section 1010.1.5.
- 15. Delete Section 1010.1.6.
- 16. Delete Section 1010.1.7.
- 17. Delete Section 1010.1.8.
- 18. 3. Change Section 1010.1.9 to read:

1010.1.9 Door operations. Except as specifically permitted by this section or the applicable building code, egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort.

- 4. Delete Section Sections 1010.1.9.1 through 1010.1.9.3.
- 19. Delete Section 1010.1.9.2.
- 20. Change Section 1010.1.9.3 to read:
- 21. Delete 5. Change Section 1010.1.9.4. to read:

(N)1010.1.9.3 1010.1.9.4 Locks and latches. Where required, a readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background and shall be maintained. Emergency supplemental hardware provided in accordance with the applicable building code shall be provided with a readily visible durable sign posted on the egress side on or adjacent to the door stating: THIS HARDWARE SHALL BE USED BY AUTHORIZED PERSONNEL ONLY. The sign shall be in letters 1 inch (25 mm) high on a contrasting background.

- <u>22.</u> <u>6.</u> Delete <u>Section Sections</u> 1010.1.9.5 <u>through 1010.1.10.2</u>, including subsections.
- 23. Delete Section 1010.1.9.5.1.
- 24. Delete Section 1010.1.9.6.
- 25. Delete Section 1010.1.9.7.
- 26. Delete Section 1010.1.9.8.
- 27. Delete Section 1010.1.9.9.
- 28. Delete Section 1010.1.9.10.
- 29. Delete Section 1010.1.9.11.
- 30. Delete Section 1010.1.10.
- 31. Delete Section 1010.1.10.1.
- 32. Delete Section 1010.1.10.2.

33. 7. Change Section 1010.2 to read:

(N)1010.2 1010.2 Gates. Gates serving the means of egress system shall be maintained in accordance with the applicable building code.

34. 8. Delete Section 1010.2.1.

35. 9. Change Section 1010.3 to read:

(N)1010.3 1010.3 Turnstiles. Turnstiles or similar devices shall be maintained in accordance with the applicable building code.

36. 10. Delete Section Sections 1010.3.1 through 1010.3.4, including subsections.

37. Delete Section 1010.3.2.

J. The following changes shall be made to Section 1011, Stairways:

1. Change Section 1011.1 to read:

(N)1011.1 1011.1 General. Stairways serving occupied portions of a building shall be maintained in accordance with the applicable building code.

2. Change Section 1011.2 to read:

(N)1011.2 1011.2 Width and capacity. The capacity of stairways shall be maintained in accordance with the applicable building code.

3. Change Section 1011.3 to read:

(N)1011.3 1011.3 Headroom. Headroom requirements for stairways shall be maintained in accordance with the applicable building code.

4. Change Section 1011.4 to read:

(N)1011.4 1011.4 Walkline. The walkline across winder treads shall be maintained in accordance with the applicable building code.

5. Change Section 1011.5 to read:

(N)1011.5 1011.5 Stair treads and risers. Stair treads and risers shall be maintained in accordance with the applicable building code

6. Delete Section Sections 1011.5.1 through 1011.7.4.

7. Delete Section 1011.5.2.

8. Delete Section 1011.5.3.

9. Delete Section 1011.5.4.

10. Delete Section 1011.5.4.1.

11. Delete Section 1011.5.5.

12. Delete Section 1011.5.5.1.

13. Delete Section 1011.5.5.2.

14. Delete Section 1011.5.5.3.

15. Delete Section 1011.6.

16. Delete Section 1011.7.

17. Delete Section 1011.7.1.

18. Delete Section 1011.7.2.

19. Delete Section 1011.7.3.

20. Delete Section 1011.7.4.

21. 7. Change Section 1011.8 to read:

(N)1011.8 1011.8 Vertical rise. Vertical rise of a flight of stairs shall be maintained in accordance with the applicable building code.

22. <u>8.</u> Change Section 1011.9 to read:

(N)1011.9 1011.9 Curved stairways. Curved stairways with winder treads shall be maintained in accordance with the applicable building code.

23. 9. Change Section 1011.10 to read:

(N)1011.10 1011.10 Spiral stairways. Spiral stairways used as a component in the means of egress shall be maintained in accordance with the applicable building code.

24. <u>10.</u> Change Section 1011.11 to read:

(N)1011.11 1011.11 Handrails. Handrails for stairways shall be maintained in accordance with the applicable building code.

25. 11. Change Section 1011.12 to read:

(N)1011.12 1011.12 Stairway to roof. Stairways to a roof shall be maintained in accordance with the applicable building code.

26. 12. Delete Section Sections 1011.12.1.

27. Delete Section and 1011.12.2.

28. 13. Change Section 1011.13 to read:

(N)1011.13 1011.13 Guards. Guards shall be maintained in accordance with the applicable building code.

29. 14. Change Section 1011.14 to read:

(N)1011.14 1011.14 Alternating tread devices. Alternating tread devices shall be maintained in accordance with the applicable building code.

30. 15. Delete Section Sections 1011.14.1-

31. Delete Section and 1011.14.2.

32. 16. Change Section 1011.15 to read:

(N)1011.15 1011.15 Ships ladders. Ships ladders shall be maintained in accordance with the applicable building code.

- 33. 17. Delete Section Sections 1011.15.1-
- 34. Delete Section 1011.15.2.
- 35. Delete Section through 1011.16.
- K. The following changes shall be made to Section 1012, Ramps:
  - 1. Change Section 1012.1 to read:

(N)1012.1 1012.1 Scope. The provisions of this section shall apply to the maintenance of ramps used as a component of a means of egress.

2. Change Section 1012.2 to read:

(N)1012.2 1012.2 Slope. Ramp slopes shall be maintained in accordance with the applicable building code.

3. Change Section 1012.3 to read:

(N)1012.3 1012.3 Cross slope. The cross slope for ramps shall be maintained in accordance with the applicable building code.

4. Change Section 1012.4 to read:

(N)1012.4 1012.4 Vertical rise. The rise for any ramp run shall be maintained in accordance with the applicable building code.

5. Change Section 1012.5 to read:

(N)1012.5 1012.5 Minimum dimensions. The minimum dimensions of means of egress ramps shall be maintained in accordance with the applicable building code.

- 6. Delete Section Sections 1012.5.1.
- 7. Delete Section 1012.5.2.
- 8. Delete Section through 1012.5.3.
- 9. 7. Change Section 1012.6 to read:

(N)1012.6 1012.6 Landings. Landings serving ramps shall be maintained in accordance with the applicable building code.

- 10. 8. Delete Section Sections 1012.6.1 through 1012.7.2.
- 11. Delete Section 1012.6.2.
- 12. Delete Section 1012.6.3.
- 13. Delete Section 1012.6.4.
- 14. Delete Section 1012.6.5.
- 15. Delete Section 1012.7.

- 16. Delete Section 1012.7.2.
- 17. 9. Change Section 1012.8 to read:

(N)1012.8 1012.8 Handrails. Handrails serving ramps shall be maintained in accordance with the applicable building code.

18. 10. Change Section 1012.9 to read:

(N)1012.9 1012.9 Guards. Guards shall be maintained in accordance with the applicable building code.

19. 11. Change Section 1012.10 to read:

(N)1012.10 1012.10 Edge protection. Edge protection shall be maintained in accordance with the applicable building code.

- 20. 12. Delete Section Sections 1012.10.1-
- 21. Delete Section and 1012.10.2.
- L. The following changes shall be made to Section 1013, Exit Signs:
  - 1. Change Section 1013.1 to read:

(N)1013.1 1013.1 Where required. Exits and exit access doors shall be maintained in accordance with the applicable building code.

2. Change Section 1013.2 to read:

(N)1013.2 1013.2 Floor-level exit signs in Group R-1. Floor-level exit signs in Group R-1 buildings shall be maintained in accordance with the applicable building code.

3. Change Section 1013.3 to read:

(N)1013.3 1013.3 Illumination. Exit sign illumination shall be maintained in accordance with the applicable building code.

4. Change Section 1013.4 to read:

(N)1013.4 1013.4 Raised character and braille exit signs. Raised character and braille exit signs shall be maintained in accordance with the applicable building code.

5. Change Section 1013.5 to read:

(N)1013.5 1013.5 Internally illuminated exit signs. Electrically powered, self-luminous, and photoluminescent exit signs shall be maintained in accordance with the applicable building code.

6. Change Section 1013.6 to read:

(N)1013.6 1013.6 Externally illuminated exit signs. Externally illuminated exit signs shall be maintained in accordance with the applicable building code.

7. Delete Section Sections 1013.6.1-

- 8. Delete Section 1013.6.2. 9. Delete Section through 1013.6.3.
- M. The following changes shall be made to Section 1014, Handrails:
  - 1. Change Section 1014.1 to read:

(N)1014.1 1014.1 Where required. Handrails serving stairways, ramps, stepped aisles, and ramped aisles shall be maintained in accordance with the applicable building code.

2. Change Section 1014.2 to read:

(N)1014.2 1014.1 Height. Handrail height, shall be maintained in accordance with the applicable building code.

3. Change Section 1014.3 to read:

(N)1014.3 1014.3 Handrail graspability. Handrail graspability shall be maintained in accordance with the applicable building code.

- 4. Delete Section 1014.3.1.
- 5. Delete Section 1014.3.2.
- 6. Change Section 1014.4 to read:

(N)1014.4 1014.4 Continuity. Handrail continuity shall be maintained in accordance with the applicable building code.

- 7. Delete Section 1014.5.
- 8. Delete Section 1014.6.
- 9. Change Section 1014.7 to read:

(N)1014.7 1014.7 Clearance. Clear space between a handrail and a wall or other surface shall be maintained in accordance with the applicable building code.

10. Change Section 1014.8 to read:

(N)1014.8 1014.8 Projections. Projections into the required width of aisles, stairways, and ramps at each side shall not exceed the requirements of the applicable building code.

11. Change Section 1014.9 to read:

(N)1014.9 1014.9 Intermediate handrails. Where provided, intermediate handrails shall be maintained in accordance with the applicable building code.

- N. The following changes shall be made to Section 1015, Guards:
  - 1. Change Section 1015.1 to read:

(N)1015.1 1015.1 General. Guards shall be maintained in accordance with the applicable building code.

2. Delete Section 1015.2.

- 3. Delete Section 1015.2.1.
- 4. Change Section 1015.3 to read:

(N)1015.3 1015.3 Height. Guard height shall be maintained in accordance with the applicable building code.

5. Change Section 1015.4 to read:

(N)1015.4 1015.4 Opening limitations. Openings in guards shall be maintained in accordance with the applicable building code.

6. Change Section 1015.5 to read:

(N)1015.5 1015.5 Screen porches. Guards provided for screen porches shall be maintained in accordance with the applicable building code.

7. Change Section 1015.6 to read:

(N)1015.6 1015.6 Mechanical equipment, systems and devices. Guards provided for mechanical equipment shall be maintained in accordance with the applicable building code.

8. Change Section 1015.7 to read:

(N)1015.7 1015.7 Roof access. Guards provided for roof access shall be maintained in accordance with the applicable building code.

9. Change Section 1015.8 to read:

(N)1015.8 1015.8 Window openings. Windows shall be maintained in accordance with the applicable building code.

- 10. Delete Section 1015.8.1.
- O. The following changes shall be made to Section 1016, Exit Access:
  - 1. Change Section 1016.1 to read:

(N)1016.1 1016.1 General. The exit access shall be maintained in accordance with the applicable building code.

2. Change Section 1016.2 to read:

(N)1016.2 1016.2 Egress through intervening spaces. Egress through intervening spaces shall be maintained in accordance with the applicable building code.

- 3. Delete Section 1016.2.1.
- P. The following changes shall be made to Section 1017, Exit Access Travel Distance:
  - 1. Change Section 1017.1 to read:

(N)1017.1 1017.1 General. Travel distance within the exit access portion of the means of egress system shall be

maintained in accordance with the applicable building code.

- 2. Delete Section Sections 1017.2 through 1017.3.1 and Table 1017.2.
- 3. Delete Section 1017.2.1.
- 4. Delete Section 1017.2.2.
- 5. Delete Section 1017.3.
- 6. Delete Section 1017.3.1.
- Q. The following changes shall be made to Section 1018, Aisles:
  - 1. Change Section 1018.1 to read:

(N)1018.1 1018.1 General. Aisles and aisle accessways serving as a portion of the exit access in the means of egress system shall be maintained in accordance with the applicable building code.

2. Change Section 1018.2 to read:

(N)1018.2 1018.2 Aisles in assembly spaces. Aisles and aisle accessways serving a room or space used for assembly purposes shall be maintained in accordance with the applicable building code.

3. Change Section 1018.3 to read:

(N)1018.3 1018.3 Aisles in Groups B and M. In Groups B and M occupancies, the aisle width shall be maintained in accordance with the applicable building code.

4. Change Section 1018.4 to read:

(N)1018.4 1018.4 Aisle accessways in Group M. Aisle accessways in Group M shall be maintained in accordance with the applicable building code.

5. Change Section 1018.5 to read:

(N)1018.5 1018.5 Aisles in other than assembly spaces and Groups B and M. Aisles in other than assembly spaces and Groups B and M shall be maintained in accordance with the applicable building code.

- R. The following changes shall be made to Section 1019, Exit Access Stairways and Ramps.
  - 1. Change Section 1019.1 to read:

(N)1019.1 1019.1 General. Exit access stairways and ramps serving as an exit access component in a means of egress system shall be maintained in accordance with the applicable building code.

- 2. Delete Section Sections 1019.2-
- 3. Delete Section 1019.3.
- 4. Delete Section through 1019.4.

- S. The following changes shall be made to Section 1020, Corridors:
  - 1. Change Section 1020.1 to read:

(N)1020.1 1020.1 Maintenance. Corridors shall be maintained in accordance with the applicable building code.

- 2. Delete Section 1020.1.1 and Table 1020.1.
- 3. Change Section 1020.2 to read:

(N)1020.2 1020.2 Width and capacity. The width and capacity of corridors shall be maintained in accordance with the applicable building code.

- 4. Delete Table 1020.2.
- 5. Delete Section Sections 1020.4.
- 6. Delete Section 1020.5.
- 7. Delete Section through 1020.5.1.
- 8. 6. Change Section 1020.6 to read:

(N)1020.6 1020.6 Corridor continuity. The continuity of fire-resistance-rated corridors shall be maintained in accordance with the applicable building code.

- T. The following changes shall be made to Section 1021, Egress Balconies:
  - 1. Change Section 1021.1 to read:

(N)1021.1 1021.1 General. Balconies used for egress purposes shall be maintained in accordance with the applicable building code.

2. Change Section 1021.2 to read:

(N)1021.2 1021.2 Wall separation. Wall separation for egress balconies shall be maintained in accordance with the applicable building code.

- 3. Delete Section 1021.3.
- 4. Change Section 1021.4 to read:

(N)1021.4 1021.4 Location. The fire separation distance for exterior egress balconies shall be maintained in accordance with the applicable building code.

- U. The following changes shall be made to Section 1022, Exits:
  - 1. Change Section 1022.1 to read:

(N)1022.1 1022.1 General. An exit shall not be used for any purpose that interferes with its function as a means of egress. Once a given level of exit protection is achieved, such level of protection shall not be reduced until arrival at the exit discharge. Exits shall be continuous from the point of entry into the exit to the exit discharge. Exits

shall be maintained in accordance with the applicable building code.

2. Change Section 1022.2 to read:

(N)1022.2 1022.2 Exterior exit doors. Exterior exit doors shall be maintained in accordance with the applicable building code.

- 3. Delete Section Sections 1022.2.1-
- 4. Delete Section and 1022.2.2.
- V. The following changes shall be made to Section 1023, Interior Exit Stairways and Ramps:
  - 1. Change Section 1023.1 to read:

(N)1023.1 1023.1 General. Interior exit stairways and ramps serving as an exit component in a means of egress system shall be maintained in accordance with the applicable building code.

- 2. Delete Section 1023.2.
- 3. Delete Section 1023.3.
- 4. Delete Section 1023.3.1.
- 5. Change Section 1023.4 to read:

(N)1023.4 1023.4 Openings. Interior exit stairway and ramp opening protectives shall be maintained in accordance with the applicable building code.

- 6. Delete Section 1023.5.
- 7. Change Section 1023.6 to read:

(N)1023.6 1023.6 Ventilation. Equipment and ductwork for interior exit stairway and ramp ventilation shall be maintained in accordance with the applicable building code.

8. Change Section 1023.7 to read:

(N)1023.7 1032.7 Interior exit stairway and ramp exterior walls. Exterior walls of the interior exit stairway or ramp shall be maintained in accordance with the applicable building code.

9. Change Section 1023.8 to read:

(N)1023.8 1023.8 Discharge identification. An interior exit stairway and ramp shall not continue below its level of exit discharge unless an approved barrier is provided at the level of exit discharge to prevent persons from unintentionally continuing into levels below. Directional exit signs shall be provided and maintained in accordance with the applicable building code.

10. Change Section 1023.9.1 to read:

(N)1023.9.1 1023.9.1 Signage requirements. Stairway identification signs shall comply with all of the following requirements:

- 1. The signs shall be a minimum size of 18 inches (457 mm) by 12 inches (305 mm).
- 2. The letters designating the identification of the interior exit stairway and ramp shall be not less than 1-1/2 inches (38 mm) in height.
- 3. The number designating the floor level shall be not less than of 5 inches (127 mm) in height and located in the center of the sign.
- 4. Other lettering and numbers shall be not less than 1 inch (25 mm) in height.
- 5. Characters and their background shall have a nonglare finish. Characters shall contrast with their background with either light characters on a dark background or dark characters on a light background.
- 11. Change Section 1023.10 to read:

(N)1023.10 1023.10 Elevator lobby identification signs. At landings in interior exit stairways where two or more doors lead to the floor level, any door with direct access to an enclosed elevator lobby shall be identified by signage located on the door or directly adjacent to the door stating "Elevator Lobby." Signage shall be in accordance with Section 1023.9.1, Items 4 and 5.

12. Change Section 1023.11 to read:

(N)1023.11 1023.11 Smokeproof enclosures. Smokeproof enclosures shall be maintained in accordance with the applicable building code.

- 13. Delete Section Sections 1023.11.1 through 1023.12.
- 14. Delete Section 1023.11.2.
- W. The following changes shall be made to Section 1024, Exit Passageways:
  - 1. Change Section 1024.1 to read:

(N)1024.1 1024.1 Exit passageways. Exit passageways serving as an exit component in a means of egress system shall be maintained in accordance with the applicable building code.

2. Change Section 1024.2 to read:

(N)1024.2 1024.2 Width. The minimum width or required capacity of exit passageways shall be maintained in accordance with the applicable building code.

- 3. Delete Section 1024.3.
- 4. Delete Section 1024.4.
- 5. Change Section 1024.5 to read:

(N)1024.5 <u>1024.5</u> Openings. Exit passageway opening protectives shall be maintained in accordance with the applicable building code.

6. Change Section 1024.6 to read:

(N)1024.6 1024.6 Penetrations. Penetration protection shall be maintained in accordance with the applicable building code.

7. Change Section 1024.7 to read:

(N)1024.7 1024.7 Ventilation. Equipment and ductwork for exit passageway ventilation shall be maintained in accordance with the applicable building code.

- 8. Delete Section 1024.8.
- X. The following changes shall be made to Section 1025, Luminous Egress Path Markings:
  - 1. Change Section 1025.1 to read:

(N)1025.1 1025.1 General. Luminous egress path markings shall be maintained in accordance with the applicable building code.

2. Change Section 1025.2 to read:

(N)1025.2 1025.2 Markings within exit components. Egress path markings provided in interior exit stairways, interior exit ramps, and exit passageways shall be maintained in accordance with the applicable building code.

- 3. Delete Section Sections 1025.2.1 through 1025.3.
- 4. Delete Section 1025.2.2.
- 5. Delete Section 1025.2.3.
- 6. Delete Section 1025.2.4
- 7. Delete Section 1025.2.4.1.
- 8. Delete Section 1025.2.4.2.
- 9. Delete Section 1025.2.4.3.
- 10. Delete Section 1025.2.5.
- 11. Delete Section 1025.2.6.
- 12. Delete Section 1025.2.6.1.
- 13. Delete Section 1025.2.6.2.
- 14. Delete Section 1025.2.6.3.
- 15. Delete Section 1025.3.
- 16. 4. Change Section 1025.4 to read:

(N)1025.4 1025.4 Self-luminous and photoluminescent. Self-luminous and photoluminescent egress path markings shall be maintained in accordance with the applicable building code.

17. <u>5.</u> Change Section 1025.5 to read:

(N)1025.5 1025.5 Illumination. Photoluminescent exit path markings shall be maintained in accordance with the applicable building code.

- Y. The following changes shall be made to Section 1026, Horizontal Exits:
  - 1. Change Section 1026.1 to read:

(N)1026.1 1026.1 Horizontal exits. Horizontal exits serving as an exit in a means of egress system shall be maintained in accordance with the applicable building code.

2. Change Section 1026.2 to read:

(N)1026.2 1026.2 Separation. The separation between buildings or refuge areas connected by a horizontal exit shall be maintained in accordance with the applicable building code.

3. Change Section 1026.3 to read:

(N)1026.3 1026.3 Opening protectives. Fire doors in horizontal exits shall be maintained in accordance with the applicable building code.

4. Change Section 1026.4 to read:

(N)1026.4 1026.4 Refuge area. Where provided, the refuge area of a horizontal exit shall be maintained in accordance with the applicable building code.

- 5. Delete Section Sections 1026.4.1 through 1026.5.
- 6. Delete Section 1026.4.2.
- Z. The following changes shall be made to Section 1027, Exterior Exit Stairways and Ramps:
  - 1. Change Section 1027.1 to read:

(N)1027.1 1027.1 Exterior exit stairways and ramps. Exterior exit stairways and ramps serving as an element of a required means of egress shall be maintained in accordance with the applicable building code.

2. Change Section 1027.2 to read:

(N)1027.2 1027.2 Use in a means of egress. Exterior exit stairways shall not be used as an element of a required means of egress.

- 3. Delete Section Sections 1027.3 through 1027.6.
- 4. Delete Section 1027.4.
- 5. Delete Section 1027.5.
- 6. Delete Section 1027.6.

AA. The following changes shall be made to Section 1028, Exit Discharge:

1. Change Section 1028.1 to read:

(N)1028.1 1028.1 General. The exit discharge shall be maintained in accordance with the applicable building code.

2. Change Section 1028.2 to read:

(N)1028.2 1028.2 Exit discharge width or capacity. The minimum width or required capacity of the exit discharge shall be maintained in accordance with the applicable building code.

3. Change Section 1028.3 to read:

(N)1028.3 1028.3 Exit discharge components. Exit discharge components shall be maintained in accordance with the applicable building code.

4. Change Section 1028.4 to read:

(N)1028.4 1028.4 Egress courts. Egress courts serving as a portion of the exit discharge in the means of egress system shall be maintained in accordance with the applicable building code.

5. Change Section 1028.4.1 to read:

(N)1028.4.1 1028.4.1 Width or capacity. The required capacity of egress courts shall be maintained in accordance with the applicable building code.

- 6. Delete Section 1028.4.2.
- 7. Change Section 1028.5 to read:

(N)1028.5 1028.5 Access to a public way. Where provided, access to a public way shall be maintained in accordance with the applicable building code.

Exception: Where access to a public way cannot be provided, a safe dispersal area shall be provided where all of the following are met:

- 1. The area shall be of a size to accommodate not less than 5 square feet (0.46 m<sup>2</sup>) for each person.
- 2. The area shall be located on the same lot not less than 50 feet (15 240 (15,240 mm) away from the building requiring egress.
- 3. The area shall be permanently maintained and identified as a safe dispersal area.
- 4. The area shall be provided with a safe and unobstructed path of travel from the building.

BB. The following changes shall be made to Section 1029, Assembly:

1. Change Section 1029.1 to read:

(N)1029.1 1029.1 General. The means of egress serving a room or space used for assembly purposes that contains seats, tables, displays, equipment or other material shall

be maintained in accordance with the applicable building code.

- 2. Delete Section 1029.1.1.
- 3. Delete Section 1029.1.1.1.
- 4. Change Section 1029.2 to read:

(N)1029.2 1029.2 Assembly main exit. The assembly main exit shall be maintained in accordance with the applicable building code.

5. Change Section 1029.3 to read:

(N)1029.3 1029.3 Assembly other exits. Other assembly exits shall be maintained in accordance with the applicable building code.

- 6. Delete Section 1029.4.
- 7. Change Section 1029.5 to read:

(N)1029.5 1029.5 Interior balcony and gallery means of egress. Interior balcony and gallery means of egress shall be maintained in accordance with the applicable building code.

8. Change Section 1029.6 to read:

(N)1029.6 1029.6 Capacity of aisle for assembly. The required capacity of aisles shall be maintained in accordance with the applicable building code.

- 9. Delete Section Sections 1029.6.1.
- 10. Delete Section 1029.6.2 through 1029.6.3 and Table 1029.6.2.
- 11. Delete Section 1029.6.2.1.
- 12. Delete Section 1029.6.2.2.
- 13. Delete Section 1029.6.2.3.
- 14. Delete Section 1029.6.3.
- 15. 10. Change Section 1029.7 to read:

(N)1029.7 1029.7 Travel distance. Travel distance shall be maintained in accordance with the applicable building code.

16. 11. Change Section 1029.8 to read:

(N)1029.8 1029.8 Common path of egress travel. The common path of egress travel shall be maintained in accordance with the applicable building code.

- 17. 12. Delete Section 1029.8.1.
- 18. 13. Change Section 1029.9 to read:

(N)1029.9 1029.9 Assembly aisles are required. Assembly aisles shall be maintained in accordance with the applicable building code.

- 19. 14. Change Section 1029.9.1 to read:
- (N)1029.9.1 1029.9.1 Minimum aisle width. The minimum clear width for aisles shall be maintained in accordance with the applicable building code.
- 20. 15. Delete Section Sections 1029.9.2 through 1029.9.8.
- 21. Delete Section 1029.9.3.
- 22. Delete Section 1029.9.4.
- 23. Delete Section 1029.9.5
- 24. Delete Section 1029.9.6.
- 25. Delete Section 1029.9.7.
- 26. Delete Section 1029.9.8.
- 27. 16. Change Section 1029.10 to read:
- (N)1029.10 1029.10 Transitions. Transitions between stairways and stepped aisles shall be maintained in accordance with the applicable building code.
- 28. <u>17.</u> Delete <u>Section</u> <u>Sections</u> 1029.10.1 <u>through</u> 1029.12.2.2.
- 29. Delete Section 1029.10.2.
- 30. Delete Section 1029.10.2.1.
- 31. Delete Section 1029.10.2.2.
- 32. Delete Section 1029.10.3.
- 33. Delete Section 1029.11.
- 34. Delete Section 1029.11.1.
- 35. Delete Section 1029.11.2.
- 36. Change Section 1029.12 to read:
  - (N)1029.12 Aisle accessways. Aisle accessways for seating at tables shall maintained in accordance with the applicable building code.
- 37. Delete Section 1029.12.1.
- 38. Delete Section 1029.12.1.1.
- 39. Delete Section 1029.12.1.2.
- 40. Delete Section 1029.12.2.
- 41. Delete Section 1029.12.2.1 and Table 1029.12.2.1.
- 42. Delete Section 1029.12.2.2.
- 43. 18. Change Section 1029.13 to read:
  - (N)1029.13 Assembly aisle walking surfaces. Ramped and stepped aisles 1029.13 Aisle accessways. Aisle accessways for seating at tables shall be maintained in accordance with the applicable building code.

- 44. <u>19.</u> Delete <u>Section Sections</u> 1029.13.1 <u>through</u> 1029.13.2.2 and Table 1029.13.2.1.
- 45. Delete Section 1029.13.1.1.
- 46. Delete Section 1029.13.1.2.
- 47. Delete Section 1029.13.1.3.
- 48. Delete Section 1029.13.2.
- 49. Delete Section 1029.13.2.1.
- 50. Delete Section 1029.13.2.2.
- 51. Delete Section 1029.13.2.2.1.
- 52. Delete Section 1029.13.2.3.
- 53. Delete Section 1029.13.2.4.
- 54. Delete 20. Change Section 1029.14- to read:
  - 1029.14 Assembly aisle walking surfaces. Ramped and stepped aisles shall be maintained in accordance with the applicable building code.
- 21. Delete Sections 1029.14.1 through 1029.15.
- 55. 22. Change Section 1029.15 1029.16 to read:
  - (N)1029.15 1029.16 Handrails. Handrails serving ramped aisles shall be maintained in accordance with the applicable building code.
- 56. Delete Section 1029.15.1.
- 57. Delete Section 1029.15.2.
- 58. Delete Section 1029.15.3.
- 59. Delete Section 1029.15.4.
- 60. Change Section 1029.16 to read:
- (N)1029.16 Assembly guards. Guards adjacent to seating in a building, room or space used for assembly purposes shall be maintained in accordance with the applicable building code.
- 61. Change Section 23. Delete Sections 1029.16.1 to read: through 1029.16.4.
  - (N)1029.16.1 Perimeter guards. Perimeter guards shall be maintained in accordance with the applicable building code.
- 62. Delete Section 1029.16.2.
- 63. Delete Section 1029.16.3.
- 64. Delete Section 1029.16.4.
- 24. Change Sections 1029.17 and 1029.17.1 to read:
- 1029.17 Assembly guards. Guards adjacent to seating in a building, room, or space used for assembly purposes

shall be maintained in accordance with the applicable building code.

1029.17.1 Perimeter guards. Perimeter guards shall be maintained in accordance with the applicable building code.

- 25. Delete Sections 1029.17.2 through 1029.17.4.
- CC. The following changes shall be made to Section 1030, Emergency Escape and Rescue:
  - 1. Change Section 1030.1 and delete Section 1030.1.1.

Section 1030.1 to read:

(N)1030.1 1030.1 General. Emergency escape and rescue components of a building shall be maintained in accordance with the applicable building code.

2. Change Section 1030.2 to read:

(N)1030.2 1030.2 Minimum size. Emergency escape and rescue openings shall be maintained in accordance with the applicable building code.

- 3. Delete Section 1030.2.1.
- 4. Change Section 1030.3 to read:

(N)1030.3 1030.3 Maximum height from floor. Emergency escape and rescue opening height shall be maintained in accordance with the applicable building code.

5. Change Section 1030.4 to read:

1030.4 Operational constraints. The operation of emergency escape and rescue openings shall be maintained in accordance with the applicable building code.

6. Change Section 1030.5 to read:

(N)1030.5 1030.4 Window wells. Window wells shall be maintained in accordance with the applicable building code.

- 7. <u>6.</u> Delete <u>Section 1030.5.1</u> <u>Sections 1030.4.1 and 1030.4.2.</u>
- 8. Delete 7. Change Section 1030.5.2. 1030.5 to read:

1030.5 Operational constraints. The operation of emergency escape and rescue openings shall be maintained in accordance with the applicable building code.

- <u>DD.</u> The following changes shall be made to Section 1031, Maintenance of the Means of Egress:
  - 1. Change Sections 1031.2, 1031.2.1, and 1031.2.2 to read:

1031.2 Reliability. Unless otherwise permitted by the applicable building code, required exit accesses, exits, and exit discharges shall be continuously maintained free

from obstructions or impediments to full instant use in the case of fire or other emergency where the building area served by the means of egress is occupied. An exit or exit passageway shall not be used for any purpose that interferes with a means of egress.

- 1031.2.1 Security devices and egress locks. Security devices and locking arrangements in the means of egress that restrict, control, or delay egress shall be maintained as required by this chapter.
- 1031.2.2 Locking arrangements in educational occupancies. In Group E occupancies, except Group E day care facilities, and Group B educational occupancies, exit access doors from classrooms, offices, and other occupied rooms, except for exit doors and doors across corridors, shall be permitted to be provided with emergency supplemental hardware where all of the following conditions are met:
- 1. The door shall be capable of being opened from outside the room with a key, proprietary device provided by the manufacturer, or other approved means.
- 2. The door shall be openable from within the room in accordance with Section 1010.1.9, except emergency supplemental hardware is not required to comply with Chapter 11.

Note: School officials should consult with their legal counsel regarding provisions of the Americans with Disabilities Act of 1990 (42 USC § 12101 et seq.) and any other applicable requirements.

- 3. Installation of emergency supplemental hardware on fire door assemblies must comply with Section 716.2. Modifications shall not be made to listed panic hardware, fire door hardware, or door closures.
- 4. The emergency supplemental hardware shall not be capable of being used on other doors not intended to be used and shall have at least one component that requires modification to, or is permanently affixed to, the surrounding wall, floor, door, or frame assembly construction for it to properly function.
- 5. Employees shall engage in lockdown training procedures on how to deploy and remove the emergency supplemental hardware, and its use shall be incorporated in the approved lockdown plan complying with the SFPC.
- 6. The emergency supplemental hardware and its components shall be maintained in accordance with the SFPC.
- 7. Approved emergency supplemental hardware shall be of consistent type throughout a building.

Exception: The building official may approve alternate types of emergency supplemental hardware in

accordance with Section 110.1 when a consistent device cannot be installed.

#### 2. Add Section 1031.11 to read:

1031.11 Maintenance of emergency supplemental hardware. Emergency supplemental hardware shall be installed in accordance with the applicable building code and shall be maintained in accordance with this code and the manufacturer's instructions. The fire code official shall be authorized to direct the practical application of any such hardware device to ensure the device operates as designed and is free from any defects, damage, or conditions that may restrict the deployment and removal of such hardware device.

# 13VAC5-51-138.1. IFC Chapter 12 Energy Systems.

- A. Make the following changes to Section 1201, General.
  - 1. Change Sections 1201.1 and 1201.2 to read:
    - 1201.1 Scope. The provisions of this chapter shall apply to the operation and maintenance of energy systems used for generating or storing energy.
    - 1201.2 Electrical wiring and equipment. Electrical wiring and equipment used in connection with energy systems shall be maintained in accordance with the applicable building code.
  - 2. Delete Section 1201.3.
- B. Make the following changes to Section 1203, Emergency and Standby Power Systems.
  - 1. Change Sections 1203.1 and 1203.1.1 to read:
    - 1203.1 General. Emergency power systems and standby power systems shall be maintained in accordance with the applicable building code.
  - <u>1203.1.1 Generators. Emergency and standby power generators shall be listed.</u>
  - 2. Delete Sections 1203.1.2 and 1203.1.3.
  - 3. Change Section 1203.1.4 to read:
    - 1203.1.4 Load transfer. Emergency power systems shall automatically provide secondary power within 10 seconds after primary power is lost unless specified otherwise by the applicable building code. Standby power systems shall automatically provide secondary power within 60 seconds after primary power is lost unless specified otherwise by the applicable building code.
  - 4. Change Section 1203.1.5 to read:
    - 1203.1.5 Load duration. Emergency power systems and standby power systems shall require power for a minimum duration of hours without being refueled or

recharged, unless otherwise specified by the applicable building code.

#### 5. Change Section 1203.1.6 to read:

1203.1.6 Uninterruptable power source. An uninterrupted source of power shall be provided for equipment where required by the manufacturer's instructions, the listing, the applicable building code, or the applicable referenced standards.

#### 6. Change Section 1203.1.7 to read:

1203.1.7 Interchangeability. Emergency power systems shall be an acceptable alternative for installations that require standby power systems when permitted by the applicable building code.

- 7. Delete Section 1203.1.8.
- 8. Change Section 1203.1.9 to read:

1203.1.9 Maintenance. Existing installations shall be maintained in accordance with the original approval and Section 1203.4.

# 9. Change Section 1203.2 to read:

1203.2 Specific equipment requirements. Emergency and standby power systems shall be maintained in accordance with Sections 1203.2.1 through 1203.2.18.

# 10. Change Section 1203.2.2 to read:

1203.2.2 Elevators and platform lifts. Standby power shall be maintained in accordance with NFPA 72 for elevators and platform lifts required by the applicable building code.

- 11. Delete Section 1203.2.3.
- 12. Change Section 1203.2.4 to read:

1203.2.4 Emergency voice or alarm communication systems. Emergency power shall be maintained for emergency voice or alarm communication systems as required by the applicable building code. The system shall be capable of powering the required load for a duration of not less than 24 hours, as required in NFPA 72.

#### 13. Change Section 1203.2.5 to read:

1203.2.5 Exit signs. Emergency power for exit signs shall be capable of powering the required load for a duration of not less than 90 minutes unless otherwise specified by the applicable building code.

# 14. Change Section 1203.2.6 to read:

1203.2.6 Gas detection systems. Emergency power and standby power shall be maintained for gas detection systems in accordance with the applicable building code.

## 15. Change Section 1203.2.7 to read:

1203.2.7 Group I-2 occupancies. Essential electrical systems for Group I-2 occupancies shall be maintained in accordance with NFPA 70 when required by the applicable building code.

#### 16. Change Section 1203.2.8 to read:

1203.2.8 Group I-3 occupancies. Power-operated sliding doors or power-operated locks for swinging doors in Group I-3 occupancies shall be operable by a manual release mechanism at the door, and emergency power provided for the doors and locks shall be maintained where required by the applicable building code.

#### 17. Change Section 1203.2.9 to read:

1203.2.9 Hazardous materials. Emergency and standby power shall be maintained in accordance with NFPA 70 in occupancies with hazardous materials when required by the applicable building code.

# 18. Delete Section 1203.2.10.

## 19. Change Section 1203.2.11 to read:

1203.2.11 Horizontal sliding doors. Standby power shall be maintained in accordance with NFPA 70 for horizontal sliding doors as required by the applicable building code. The standby power supply shall have a capacity to operate not fewer than 50 closing cycles of the door unless otherwise specified by the applicable building code.

# 20. Change Section 1203.2.12 to read:

1203.2.12 Hydrogen fuel gas rooms. Standby power shall be maintained in accordance with NFPA 70 for hydrogen fuel gas rooms as required by the applicable building code.

#### 21. Change Section 1203.2.13 to read:

1203.2.13 Laboratory suites. Standby or emergency power for laboratory suites shall be maintained in accordance with the applicable building code.

## 22. Change Section 1203.2.14 to read:

1203.2.14 Means of egress illumination. Emergency power shall be maintained for means of egress illumination in accordance with the applicable building code.

#### 23. Change Section 1203.2.15 to read:

1203.2.15 Membrane structures. Standby power shall be maintained for auxiliary inflation systems in permanent membrane structures in accordance with applicable building code. Auxiliary inflation systems shall be provided in temporary air-supported and air-inflated

membrane structures in accordance with Section 3103.10.4.

## 24. Change Section 1203.2.16 to read:

1203.2.16 Semiconductor fabrication facilities.
Emergency power shall be maintained in accordance with NFPA 70 for semiconductor fabrication facilities as required by the applicable building code.

#### 25. Change Section 1203.2.17 to read:

1203.2.17 Smoke control systems. Standby power shall be maintained in accordance with NFPA 70 for smoke control as required by the applicable building code.

# 26. Change Section 1203.2.18 to read:

1203.2.18 Underground buildings. Emergency and standby power shall be maintained in accordance with NFPA 70 in underground buildings as required by the applicable building code.

## 27. Change Section 1203.3 to read:

1203.3 Critical circuits. Cables used for survivability of required critical circuits shall be listed. Electrical circuit protective systems shall be maintained in accordance with their listing requirements.

#### 28. Change Section 1203.4 to read:

1203.4 Maintenance. Emergency and standby power systems shall be maintained in accordance with NFPA 70, NFPA 110, and NFPA 111 so that the system is capable of supplying service within the time specified for the type and duration required in accordance with the applicable building code.

#### 29. Change Section 1203.5 to read:

1203.5 Operational inspection and testing. Emergency power systems, including all appurtenant components, shall be inspected and tested under load in accordance with NFPA 110, NFPA 70, and NFPA 111.

Exception: Where the emergency power system is used for standby power or peak load shaving, such use shall be recorded and shall be allowed to be substituted for scheduled testing of the generator set, provided that appropriate records are maintained.

## 30. Add Section 1203.7 to read:

1203.7 Testing of battery powered emergency lights and exit signs. Required emergency lighting utilizing battery powered emergency lights, exit signs, or both shall be tested annually. The emergency lights and exit signs shall be tested for proper operation for the time period established in the building code in effect when the equipment was installed. Written records of tests shall be retained by the owner of the building for a minimum of

- two years after the test is conducted and shall be made available to the fire code official upon request.
- <u>C. Make the following changes to Section 1204, Solar Photovoltaic Power Systems.</u>
  - 1. Change Section 1204.1 to read:
    - 1204.1 General. Solar photovoltaic power systems shall be maintained in accordance with Sections 1204.2 through 1204.5 and the applicable building code.
  - 2. Change Section 1204.2 to read:
    - 1204.2 Access and pathways. Roof access, pathways, and spacing requirements shall be maintained in accordance with the applicable building code.
  - 3. Delete Sections 1204.2.1 through 1204.3.3.
  - 4. Change Section 1204.4 to read:
    - <u>1204.4</u> Ground-mounted photovoltaic arrays. A clear, brush-free area of 10 feet (3048 mm) shall be maintained for ground-mounted photovoltaic arrays.
- <u>D. Make the following changes to Section 1205, Stationary Fuel Cell Power Systems.</u>
  - 1. Change Section 1205.1 to read:
    - 1205.1 General. Stationary fuel cell power systems shall be maintained in accordance with the applicable building code.
  - 2. Delete Sections 1205.2 and 1205.3.
  - 3. Change Section 1205.4 to read:
    - 1205.4 Maintenance. Stationary fuel cell power systems shall be maintained in accordance with the applicable building code, NFPA 70 and NFPA 853, the manufacturer's instructions, and the listing. Stationary fuel cell power systems fueled by hydrogen shall be maintained in accordance with the applicable building code, NFPA 2 and NFPA 70, the manufacturer's installation instructions, and the listing.
  - 4. Delete Sections 1205.5 through 1205.6.2 and Sections 1205.8 through 1205.13.1.
- E. Make the following changes to Section 1206, Electric Storage Energy Systems.
  - 1. Change Section 1206.2 to read:
    - 1206.2 Stationary storage battery systems. Stationary storage battery systems shall be maintained in accordance with the applicable building code.
  - 2. Delete Sections 1206.2.1 through 1206.2.4, including Table 1206.2, and change Section 1206.2.7 to read:
    - 1206.2.7 Testing, maintenance, and repair. Storage batteries and associated equipment and systems shall be

- tested and maintained in accordance with the manufacturer's instructions and the applicable building code.
- 3. Delete Sections 1206.2.8 through 1206.2.8.5.1.
- <u>4. Delete Sections 1206.2.8.7 through 1206.2.12.6, including Table 1206.2.9.</u>
- 5. Change Section 1206.3 to read:
  - 1206.3 Capacitor energy storage systems. Capacitor energy storage systems shall be maintained in accordance with the applicable building code.
- 6. Delete Sections 1206.3.1 through 1206.3.2.3.
- 7. Delete Sections 1206.3.2.6 through 1206.3.5.4.
- 8. Change Section 1206.3.6 to read:
  - 1206.3.6 Testing, maintenance, and repair. Capacitors and associated equipment and systems shall be tested maintained and repaired in accordance with the manufacturer's instructions and the applicable building code.

#### 13VAC5-51-138.4. IFC Chapter 20 Aviation Facilities.

- A. The following change shall be made to Section 2001, General:
  - Change Section 2001.3 to read:
    - 2001.3 Permits. For permits to operate aircraft-refueling vehicles, application of flammable or combustible finishes and hot work, see Section 107.2.
- B. The following changes shall be made to Section 2007, Helistops and Heliports:
  - 1. Change Section 2007.1 to read:
    - (N)2007.1 2007.1 General. Helistops and heliports shall be maintained in accordance with the applicable building code Sections 2007.2 through 2007.8.
  - 2. Change Section 2007.4 to read:
    - 2007.4 Exits. Exits and stairways shall be maintained in accordance with <u>Chapter 10 and</u> the applicable building code.
  - 3. Change Section 2007.5 to read:
    - (N)2007.5 2007.5 Standpipe systems. Where provided, A building with a rooftop helistop or heliport provided with a Class I or III standpipe systems system shall be maintained in accordance with Chapter 9 and the applicable code.
  - 4. Change Section 2007.6 to read:
    - (N)2007.6 2007.6 Foam protection. Where provided, foam fire-protection systems shall be maintained in accordance with or required by the applicable building

code, foam fire-protection capabilities shall be maintained for rooftop heliports. Such systems shall be maintained in accordance with the applicable provisions of Chapter 9 and the applicable building code.

## 13VAC5-51-138.8. IFC Chapter 21 Dry Cleaning.

A. The following change shall be made to Section 2101, General:

Change Section 2101.2 to read:

2101.2 Permit required. Permits shall be required as set forth in Section 107.2.

B. The following change shall be made to Section 2103, Classifications:

Change Section 2103.3 to read:

2103.3 Design. The occupancy classification, design and construction of dry cleaning plants shall be maintained in accordance with the applicable building code.

- C. The following changes shall be made to Section 2104, General Requirements:
  - 1. Change Section 2104.2.1 to read:

(N)2104.2.1 2104.2.1 Ventilation. Ventilation shall be operated and maintained. Ventilation systems provided shall remain in accordance with the applicable building code.

2. Change Section 2104.2.3 to read as follows:

2104.2.3 Electrical wiring and equipment. Electrical wiring and equipment in dry cleaning rooms or other locations subject to flammable vapors shall be maintained in accordance with the applicable provisions of NFPA 70 and Chapter 6. Where provided, such systems and equipment shall comply with the applicable building code.

- D. The following changes shall be made to Section 2105, Operating Requirements:
  - 1. Change Section 2105.2.3 to read:

(N)2105.2.3 2105.2.3 Ventilation. Ventilation shall be operated and maintained. Ventilation systems provided shall remain in accordance with the applicable building code.

2. Change Section 2105.3 to read:

(N)2105.3 2105.3 Types IV and V systems. Types IV and V dry cleaning systems shall be maintained in accordance with the applicable building code.

E. The following change shall be made to Section 2106, Spotting and Pretreating:

Change Section 2106.3 to read as follows:

2106.3 Class II or III solvents. Scouring, brushing, and spotting and pretreating shall be permitted to be conducted with Class II or III solvents. The maximum quantity of Class II or III solvents permitted at any work station shall be 1 gallon (4 L).

- F. The following changes shall be made to Section 2107, Dry Cleaning Systems:
  - 1. Change Section 2107.1 to read as follows:

2107.1 General equipment requirements. Dry cleaning systems, including dry cleaning units, washing machines, stills, drying cabinets, tumblers and their appurtenances, including pumps, piping, valves, filters and solvent coolers, shall be maintained in accordance with NFPA 32.

2. Delete Change Section 2107.2- to read:

2107.2 Type II systems. Unless otherwise approved by the applicable building code, Type II dry cleaning and solvent tank storage rooms shall not be operated below grade or above the lowest floor level of the building and shall be maintained in accordance with Sections 2107.2.1 through 2107.2.3.

Exception: Solvent storage tanks installed underground, in vaults, or in special enclosures in accordance with Chapter 57.

- 3. Change Section Sections 2107.2.1 and 2107.2.2 to read:
  - 2107.2.1 Firefighting access. Where required by the applicable building code, access shall be maintained from one side of Type II dry cleaning rooms for firefighting and fire control purposes in accordance with Section 503.

(N)2107.2.2 2107.2.2 Number of means of egress. The number and means of egress for Type II dry cleaning rooms shall be maintained in accordance with Chapter 10 and the applicable building code.

4. Change Section 2107.2.3 to read as follows:

2107.2.3 Spill control and secondary containment. Curbs, drains or other provisions for spill control and secondary containment shall be maintained in accordance with Section 5004.2 to collect solvent leakage and fire protection water as approved in accordance with the applicable building code.

5. Change Section 2107.3 to read as follows:

2107.3 Solvent storage tanks. Solvent storage tanks for Classes II, IIIA and IIIB liquids shall be maintained in accordance with <u>Chapter 57 and as approved in accordance</u> with the applicable building code.

Exception: As provided in applicable provisions of NFPA 32 for inside storage or treatment tanks.

- G. The following changes shall be made to Section 2108, Fire Protection:
  - 1. Change Section 2108.1 to read as follows:

2108.1 General. Fire protection systems, devices, and equipment shall be <u>inspected</u>, tested, and maintained in accordance with the applicable building code Chapter 9.

2. Change Section 2108.2 to read:

(N)2108.2 2108.2 Automatic sprinkler system. Where installed, an automatic sprinkler systemshall be maintained in accordance with the applicable building code.

3. Delete Section 2108.3.

# 13VAC5-51-139. IFC Chapter 22 Combustible Dust-Producing Operations.

A. Change Section 2201.2 to read:

2201.2 Permits. Permits shall be required for combustible dust-producing operations as set forth in Section 107.2.

B. Delete Sections 2203.1 and 2203.2.

# 13VAC5-51-140. IFC Chapter 23 Motor Fuel-Dispensing Facilities and Repair Garages.

A. The following changes shall be made to Section 2301, General:

1. Change Section 2301.1 to read:

2301.1 Scope. The operation and maintenance of automotive motor fuel-dispensing facilities, marine motor fuel-dispensing facilities, fleet vehicle motor fuel-dispensing facilities, aircraft motorvehicle motor-vehicle fuel-dispensing facilities, and repair garages shall be in accordance with this chapter. Such operations shall include both those that are accessible to the public and private operations.

2. Change Section 2301.2 to read:

2301.2 Permits. Permits shall be required as set forth in Section 107.2.

- 3. Delete Section 2301.3.
- 4. Change Section 2301.4 to read:

(N)2301.4 2301.4 Indoor motor fuel-dispensing facilities. Motor fuel-dispensing facilities located inside buildings shall be maintained in accordance with NFPA 30A and the applicable building code.

5. Change Section 2301.5 to read:

(N)2301.5 2301.5 Electrical. Electrical wiring and equipment shall be suitable for the locations in which it is installed in accordance with the applicable building code and shall be maintained in accordance with Section 605,

- the applicable provisions of NFPA 30A, and the applicable building code NFPA 70.
- 6. Change Section 2301.6 to read:

2301.6 Heat-producing appliances. Heat-producing appliances shall be suitable for the locations in which they are installed located and shall comply with the applicable provisions of NFPA 30A and the applicable building code.

- B. The following changes shall be made to Section 2303, Location of Dispensing Devices:
  - 1. Change Section 2303.1 to read:

(N)2303.1 Location of dispensing devices 2303.1 Dispensing operations. Dispensing devices operations shall be maintained in accordance with the following unless otherwise approved in accordance with the applicable building code. In no case should any of these provisions require demolition or relocation of existing equipment when approved in accordance with the applicable building code:

- 1. Ten feet (3048 mm) or more from lot lines.
- 2. Ten feet (3048 mm) or more from buildings having combustible exterior wall surfaces or buildings having noncombustible exterior wall surfaces that are not part of a one-hour fire-resistance-rated assembly or buildings having combustible overhangs.

Exception: Canopies constructed in accordance with the applicable building code providing weather protection for the fuel islands.

- 3. Such that all portions of the vehicle being fueled will be on the premises of the motor fuel-dispensing facility.
- 4. Such that the nozzle, when the hose is fully extended, will not reach within 5 feet (1524 mm) of building openings.
- 5. Twenty feet (6096 mm) or more from fixed sources of ignition.
- 2. Change Section 2303.2 and delete Section 2303.2.1.

Section 2303.2 to read:

(N)2303.2 2303.2 Emergency disconnect switches. Emergency disconnect switches An approved, clearly identified, and readily accessible emergency disconnect switch shall be maintained at an approved location in accordance with the applicable building code to stop the transfer of fuel to the fuel dispensers in the event of a fuel spill or other emergency. Such devices shall be distinctly labeled: EMERGENCY FUEL SHUTOFF. Signs shall be provided in approved locations.

- C. The following changes shall be made to Section 2304, Dispensing Operations:
  - 1. Change Section 2304.2.2 to read:

(N)2304.2.2 2304.2.2 Emergency controls. Approved emergency controls shall be provided in accordance with the applicable building code Emergency disconnect switches shall be maintained in accordance with Section 2303.2.

2. Change Section 2304.3.2 to read:

(N)2304.3.2 2304.3.2 Dispensers. Dispensing devices shall be maintained in accordance with Section 2306.7. Dispensing devices operated by the insertion of coins or currency shall not be used unless approved in accordance with the applicable building code.

3. Change Section 2304.3.3 to read:

2304.3.3 Emergency controls. Approved emergency controls shall be maintained in accordance with the applicable building code Emergency disconnect switches shall be maintained in accordance with Section 2303.2. Emergency controls shall be of a type that is only manually resettable.

4. Change Section 2304.3.5 to read:

2304.3.5 Emergency procedures. An approved emergency procedures sign, in addition to the signs required by Section 2305.6, shall be posted and maintained in a conspicuous location and shall read:

IN CASE OF FIRE SPILL OR RELEASE

- 1. USE EMERGENCY PUMP SHUTOFF
- 2. REPORT THE ACCIDENT!

FIRE DEPARTMENT TELEPHONE NO.\_\_\_\_\_

FACILITY ADDRESS:\_\_\_\_

- D. The following changes shall be made to Section 2305, Operational Requirements:
  - 1. Change Section 2305.2.4 to read:

2305.2.4 Emergency shutoff valves. Automatic emergency shutoff valves shall be checked not less than once each year by manually tripping the hold-open linkage.

2. Change Section 2305.2.5 to read:

2305.2.5 Leak detectors. Leak detection devices shall be checked and tested not less than annually in accordance with the manufacturer's specifications to ensure proper installation and operation.

- 3. Change Section 2305.4 to read:
  - 2305.4 Sources of ignition. Smoking and open flames shall be prohibited within 20 feet (6096 mm) of a fuel dispensing device. The engines of vehicles being fueled shall be shut off during fueling. Electrical equipment shall be in accordance with NFPA 70.
- E. The following changes shall be made to Section 2306, Flammable and Combustible Liquid Motor Fuel-Dispensing Facilities:
  - 1. Change Section 2306.1 to read:

2306.1 General. Operation and maintenance of flammable and combustible liquid motor fuel-dispensing facilities shall be in accordance with Chapter 57 and Sections 2306.2 through 2306.6.3 and other applicable provisions of this code.

2. Change Section 2306.2.1.1 to read:

2306.2.1.1 Inventory control and leak detection for underground tanks. Accurate inventory records shall be maintained on underground fuel storage tanks for indication of possible leakage from tanks and piping. The records shall be kept at the premises or made available for inspection by the fire official within 24 hours of a written or verbal request and shall include records for each tank. Where there is more than one system consisting of tanks serving separate pumps or dispensers for a product, the inventory record shall be maintained separately for each tank system.

Owners and operators of underground fuel storage tanks shall provide release detection for tanks and piping that routinely contain flammable and combustible liquids in accordance with one of the following methods:

- 1. Monthly inventory control to detect a release of at least 1.0% of flow-through plus 130 gallons.
- 2. Manual tank gauging for tanks with 2,000 gallon capacity or less when measurements are taken at the beginning and ending of a 36-hour to 58-hour period during which no liquid is added to or removed from the tank.
- 3. Tank tightness testing capable of detecting a 0.1 gallon per hour leak rate.
- 4. Automatic tank gauging that tests for loss of liquid.
- 5. Vapor monitoring for vapors within the soil of the tank field.
- 6. Groundwater monitoring when the groundwater is never more than 20 feet from the ground surface.
- 7. Interstitial monitoring between the underground tank and a secondary barrier immediately around or beneath the tank.

8. Other approved methods that have been demonstrated to be as effective in detecting a leak as the methods listed above.

A consistent or accidental loss of product shall be immediately reported to the fire official.

3. Change Section 2306.2.2 to read:

(N)2306.2.2 2306.2.2 Aboveground tanks located inside buildings. Aboveground tanks for the storage of Classes I, II, and IIIA liquid fuels are allowed to be located in buildings shall be maintained in accordance with where permitted by the applicable building code.

4. Change Section 2306.2.3 to read:

(N)2306.2.3 2306.2.3 Above ground tanks located outside outdoors, above grade. Aboveground tanks located outside shall be maintained in accordance with shall not be used for the storage of Class I, II, or III liquid motor fuels unless approved in accordance with the applicable building code. Tanks located at farms, construction projects, or rural areas shall comply with Section 5706.2.

- 5. Delete Table 2306.2.3.
- 6. Change Section 2306.2.4 to read:

(N)2306.2.4 2306.2.4 Aboveground tanks located in above-grade vaults or below-grade vaults. Aboveground tanks located in above grade vaults or below grade vaults shall be maintained in accordance with used for storage of Class I, II, or IIIA liquid motor fuels are allowed to be installed in vaults located above grade or below grade where permitted by the applicable building code.

- 7. Delete Section 2306.2.4.1.
- 8. Change Section 2306.2.4.2 to read:

(N)2306.2.4.2 2306.2.4.2 Fleet vehicle motor fuel-dispensing facilities. Tanks storing liquids at a fleet vehicle motor fuel-dispensing facility shall be maintained in accordance with the applicable building code.

9. Change Section 2306.2.6 to read:

(N)2306.2.6 2306.2.6 Special enclosures. Special enclosures shall be maintained in accordance with the applicable building code.

10. Change Section 2306.5 to read:

(N)2306.5 2306.5 Secondary containment. Aboveground tanks provided with drainage control or diking Drainage control or diking for aboveground tanks shall be maintained in accordance with Chapter 57 and Secondary containment systems shall be monitored either visually or automatically. Emergency venting for enclosed secondary containment systems shall be maintained and remain in accordance with the applicable building code.

Note: Drainage control and diking is not required for listed secondary containment tanks.

11. Change Section 2306.6 to read:

(N)2306.6 2306.6 Piping, valves, fittings and ancillary equipment for use with flammable or combustible liquids. The design, fabrication, and assembly, testing and inspection of piping, valves, fittings, and ancillary equipment for use with flammable or combustible liquids shall be maintained in accordance with the applicable building code. The testing and inspection of piping, valves, fittings, and ancillary equipment for use with flammable or combustible liquids shall be in accordance with Chapter 57 and Sections 2306.6.1 through 2606.6.3.

12. Change Section 2306.6.2 to read:

(N)2306.6.2 2306.6.2 Piping, valves, fittings, and ancillary equipment for aboveground tanks for Classes I, II, and III liquids. Piping, valves, fittings, and ancillary equipment for aboveground tanks for storing Classes I, II, and III liquids shall be maintained in accordance with this section and in accordance with the applicable building code.

13. Delete Change Section 2306.6.2.1- to read:

2306.6.2.1 Tank openings. Tank openings for aboveground tanks shall be through the top only unless specifically approved in accordance with the applicable building code.

14. Change Section 2306.6.2.2 to read:

(N)2306.6.2.2 2306.6.2.2 Fill-pipe connections. The fill pipe for aboveground tanks shall be maintained <u>Unless otherwise approved</u> in accordance with the applicable building code, the fill pipe operation for aboveground tanks shall be provided with a means for making a direct connection to the tank vehicle's fuel-delivery hose so that the delivery of fuel is not exposed to the open air during the filling operation.

15. Change Section 2306.6.2.3 to read:

(N)2306.6.2.3 2306.6.2.3 Overfill protection. Overfill protection for aboveground flammable and combustible liquid storage tanks shall be maintained in accordance with Chapter 57 and the applicable building code.

16. Change Section 2306.6.2.4 to read:

(N)2306.6.2.4 2306.6.2.4 Siphon prevention. An approved antisiphon method Antisiphon methods provided in the piping system to prevent flow of liquid by siphon action shall be maintained in accordance with the applicable building code.

# 17. Change Section 2306.6.2.5 to read:

(N)2306.6.2.5 2306.6.2.5 Emergency relief venting. Aboveground Emergency relief venting for aboveground storage tanks, tank compartments, and enclosed secondary containment spaces shall be maintained in accordance with Chapter 57 and the applicable building code.

## 18. Change Section 2306.6.2.6 to read:

(N)2306.6.2.6 2306.6.2.6 Spill containers. Spill containers shall be maintained A spill container having a capacity of not less than 5 gallons (19 L) shall be provided for each fill connection. For tanks with a top fill connection, spill containers shall be noncombustible and shall be fixed to the tank and equipped with a manual drain valve that drains into the primary tank unless specifically approved otherwise in accordance with the applicable building code. For tanks with a remote fill connection, a portable spill container is allowed.

# 19. Change Section 2306.6.3 to read:

(N)2306.6.3 2306.6.3 Piping, valves, fittings, and ancillary equipment for underground tanks. Piping, valves, fittings, and ancillary equipment for underground tanks shall be maintained in accordance with Chapter 57, the applicable provisions of NFPA 30A, and the applicable building code.

#### 20. Change Section 2306.7 to read:

(N)2306.7 2306.7 Fuel-dispensing systems for flammable or combustible liquids. Fuel-dispensing systems for flammable or combustible liquid fuels shall be maintained in accordance with Sections 2306.7.1 through 2306.7.9.2.4 and the applicable building code. Alcohol-blended fuel-dispensing systems shall also be maintained in accordance with Section 2306.8.

## 21. Delete Change Section 2306.7.1- to read:

2306.7.1 Listed equipment. Electrical equipment, dispensers, hose, nozzles, and submersible or subsurface pumps used in fuel dispensing systems shall be listed unless otherwise approved in accordance with the applicable building code.

## 22. Delete Change Section 2306.7.2. to read:

2306.7.2 Fixed pumps required. Unless otherwise approved in accordance with the applicable building code, Classes I and II liquids shall be transferred from tanks by means of fixed pumps that allow control of the flow and prevent leakage or accidental discharge.

# 23. Change Section 2306.7.3 to read:

(N)2306.7.3 2306.7.3 Mounting of dispensers. Dispensing devices Unless otherwise approved in accordance with the applicable building code, dispensing

devices, except those installed on top of a protected aboveground tank that qualifies as vehicle-impact resistant, shall be maintained as protected against physical damage by a concrete island 6 inches (152 mm) or more in height or shall maintain protection in accordance with Section 312. Dispensing devices shall be maintained securely fastened to their mounting surface in accordance with the dispenser manufacturer's instructions. Unless otherwise approved, dispensing devices installed indoors shall be located in a position where they cannot be struck by an out-of-control vehicle descending a ramp or other slope in accordance with the applicable building code.

## 24. Change Section 2306.7.4 to read:

(N)2306.7.4 2306.7.4 Dispenser emergency shutoff valve. Dispenser emergency shutoff valves Unless otherwise approved in accordance with the applicable building code, an approved automatic emergency shutoff valve designed to close in the event of a fire or impact shall be maintained in the liquid supply line at the base of each dispenser supplied by a remote pump. Such valve shall be maintained in accordance with the applicable building code. Emergency shutoff valves shall be maintained in accordance with the manufacturer's instructions and tested at least yearly in accordance with Section 2305.2.4.

#### 25. Change Section 2306.7.5 to read:

(N)2306.7.5 2306.7.5 Dispenser hose. Dispenser hoses shall be maintained a maximum of 18 feet (5486 mm) in length unless otherwise approved in accordance with the applicable building code. Dispenser hoses shall be maintained as listed and approved. When not in use, hoses shall be reeled, racked, or otherwise protected from damage.

## 26. Change Section 2306.7.5.1 to read:

(N)2306.7.5.1 2306.7.5.1 Emergency breakaway devices. Emergency breakaway devices shall be maintained Unless otherwise approved in accordance with the applicable building code, dispenser hoses for Classes I and II liquids shall be maintained with a listed emergency breakaway device designed to retain liquid on both sides of a breakaway point. Such devices shall be maintained in accordance with the manufacturer's instruction. Where hoses are attached to hose-retrieving mechanisms, the emergency breakaway device shall remain between the hose nozzle and point of attachment of the hose-retrieval mechanism to the hose.

## 27. Change Section 2306.7.6 to read:

(N)2306.7.6 2306.7.6 Fuel delivery nozzles. Fuel delivery nozzles shall be maintained Unless specifically approved otherwise in accordance with the applicable

building code, island-type dispensers used for dispensing Class I, II or III liquids shall be maintained with a listed automatic-closing-type nozzle valve with or without a latch-open device, and overhead-type dispensing units shall be maintained with a listed automatic-closing-type nozzle valve without a latch-open device.

Exception: A listed automatic-closing-type hose nozzle valve with latch-open device is allowed to be used on overhead-type dispensing units where the design of the system is such that the hose nozzle valve will close automatically in the event the valve is released from a fill opening or upon impact with a driveway.

- 28. Delete Section 2306.7.6.1.
- 29. Change Section 2306.7.7 to read:

(N)2306.7.7 2306.7.7 Remote pumping systems. Remote pumping systems for liquid fuels shall be maintained in accordance with <u>Sections 2306.7.7.1 and 2306.7.7.2 and</u> the applicable building code.

30. Change Section 2306.7.7.1 to read:

(N)2306.7.7.1 2306.7.7.1 Leak detection. Leak detection devices shall be maintained in accordance with the applicable building code. Unless otherwise approved by the applicable building code, where remote pumps are used to supply fuel dispensers, each pump shall maintain a listed leak detection device on the discharge side that will detect a leak in the piping or dispensers and provide an indication of the leak. A leak detection device is not required if the piping from the pump discharge to under the dispenser is above ground and visible.

31. Delete Change Section 2306.7.7.2. to read:

2306.7.7.2 Location. Remote pumps installed above grade, outside of buildings, shall remain in approved locations in accordance with the applicable building code. Dispensing operations shall not be less than 10 feet (3048 mm) from lines of adjoining property that can be built upon and not less than 5 feet (1524 mm) from any building opening. Pumps shall be maintained substantially anchored and protected against physical damage. In no case should any of these provisions require demolition or relocation of existing equipment approved in accordance with the applicable building code.

32. Change Section 2306.7.9 to read:

(N)2306.7.9 2306.7.9 Vapor-recovery and vapor-processing systems. Vapor-recovery and vapor-processing systems shall be maintained in accordance with Sections 2306.7.9.1.1 through 2306.7.9.2.4 and the applicable building code.

33. Change Section 2306.7.9.1 to read:

(N)2306.7.9.1 2306.7.9.1 Vapor-balance systems. Vapor-balance systems shall be maintained in accordance with Sections 2306.7.9.1.1 through 2306.7.9.1.5 and the applicable building code.

34. Change Section 2306.7.9.1.1 to read:

(N)2306.7.9.1.1 2306.7.9.1.1 Dispensing devices. Dispensing devices shall be maintained incorporating provisions for vapor recovery shall be listed and labeled, unless otherwise approved in accordance with the applicable building code. Where dispensing devices are modified for vapor recovery, such modifications shall be approved in accordance with the applicable building code and a listing report by a nationally recognized testing laboratory made available to the fire official upon request. Means shall be maintained to shut down fuel dispensing in the event the vapor return line becomes blocked.

35. Change Section 2306.7.9.1.2 to read:

(N)2306.7.9.1.2 2306.7.9.1.2 Vapor-return line closeoff. Vapor return line closeoffs shall be maintained An acceptable method, in accordance with the applicable building code, shall be maintained to close off the vapor return line from dispensers when the product is not being dispensed.

36. Change Section 2306.7.9.1.3 to read:

(N)2306.7.9.1.3 2306.7.9.1.3 Piping. Piping in vaporbalance systems shall be maintained in accordance with Sections 5703.6, 5704.2.9, and 5704.2.11. Unless otherwise approved in with the applicable building code, vapor return piping shall be maintained in a manner than drains back to the tank, without sags or traps in which the liquid can become trapped. Where provided, condensate tanks shall be maintained so that they can be drained without opening.

37. Change Section 2306.7.9.1.4 to read:

(N)2306.7.9.1.4 2306.7.9.1.4 Flexible joints and shear joints. Flexible joints and shear joints shall be maintained in accordance with Section 5703.6.9. Unless otherwise approved in accordance with the applicable building code, shear joints shall remain rigidly mounted and connected by a union in the vapor return piping at the base of each dispensing device and shall remain mounted flush with the top of the surface on which the dispenser is mounted.

38. Delete Change Section 2306.7.9.1.5- to read:

2306.7.9.1.5 Testing. Existing vapor return lines and vent piping shall be tested in accordance with Section 5703.6.3 when the fire official has reasonable cause to believe that a leak exists.

39. Change Section 2306.7.9.2 to read:

(N)2306.7.9.2 2306.7.9.2 Vapor-processing systems. Vapor-processing systems shall be maintained in accordance with <u>Sections 2306.7.9.2.1 through 2306.7.9.2.4 and the applicable building code.</u>

40. Change Section 2306.7.9.2.1 to read:

(N)2306.7.9.2.1 2306.7.9.2.1 Equipment. Equipment Unless otherwise approved in accordance with the applicable building code, equipment in vapor-processing systems, including hose nozzle valves, vapor pumps, flame arresters, fire checks or systems for prevention of flame propagation, controls, and vapor-processing equipment, shall be individually maintained in accordance with the applicable building code as listed for the intended use in a specified manner. Equipment for prevention of flame or propagation that has been tested and listed as suitable for the intended use in vapor processing systems that introduce air into the underground piping or storage tanks shall be maintained.

41. Delete Change Section 2306.7.9.2.2. to read:

2306.7.9.2.2 Location. Unless otherwise approved in accordance with the applicable building code, vapor-processing equipment shall remain located at grade or above grade and vapor processing units shall be operated not less than 10 feet (3048 mm) from the nearest building or lot line of a property that can be built upon. Sources of ignition shall be located not less than 50 feet (15,240 mm) from fuel-transfer areas and not less than 18 inches (457 mm) above tank fill openings and tops of dispenser islands.

42. Delete Change Section 2306.7.9.2.2.1- to read:

2306.7.9.2.2.1 Distance from dispensing devices. Unless otherwise approved in accordance with the applicable building code, vapor-processing equipment functioning during dispensing operations shall maintain a minimum of 20 feet (6096 mm) from dispensing devices.

43. Change Section 2306.7.9.2.2.2 to read:

(N)2306.7.9.2.2.2 2306.7.9.2.2.2 Physical protection. Physical protection for vapor-processing equipment shall be maintained in accordance with <u>Section 312 or</u> the applicable building code. Where approved protective enclosures are used, approved means shall be maintained to ventilate the volume within the enclosure to prevent pocketing of flammable vapors.

- 44. Delete Section 2306.7.9.2.2.3.
- 45. Delete Change Section 2306.7.9.2.3. to read:

2306.7.9.2.3 Mounting. Unless otherwise approved in accordance with the applicable building code, vapor-processing units shall be maintained securely mounted on

concrete, masonry or structural steel supports on concrete, or other noncombustible foundations. Vapor-recover and vapor-processing equipment is allowed to be operated on roofs where approved in accordance with the applicable building code.

46. Change Section 2306.7.9.2.4 to read:

(N)2306.7.9.2.4 2306.7.9.2.4 Piping. Piping in a mechanical-assist system shall be maintained in accordance with Section 5703.6 and the applicable building code.

47. Change Section 2306.8 to read:

(N)2306.8 2306.8 Alcohol-blended fuel-dispensing operations. Alcohol-blended fuel-dispensing systems shall be maintained in accordance with Section 2306.7, Sections 2306.8.1 through 2306.8.5, and the applicable building code.

48. Delete Change Section 2306.8.2. to read:

2306.8.2 Compatibility. Dispensers shall only be used with the fuels for which they have been listed, which are marked on the product in accordance with § 59.1-167.1 of the Code of Virginia. Field installed components, including hose assemblies, breakaway couplings, swivel connectors, and hose nozzle valves, shall be maintained in accordance with the listing and marking on the unit.

49. Delete Change Section 2306.8.3- to read:

2306.8.3 Facility identification. Facilities dispensing alcohol-blended fuels shall be identified in accordance with § 59.1-167.1 of the Code of Virginia.

50. Delete Change Section 2306.8.4. to read:

2306.8.4 Marking. Dispensers shall be marked in an approved manner to identify the types of alcohol-blended fuels being dispensed.

- F. The following changes shall be made to Section 2307, Liquefied Petroleum Gas Motor Fuel-Dispensing Facilities:
  - 1. Change Section 2307.1 to read:

(N)2307.1 2307.1 General. Operation and maintenance of motor fuel-dispensing facilities for liquefied petroleum gas (LP-gas) fuel shall be in accordance with this section and other applicable provisions of this code.

2. Delete Change Section 2307.2. to read:

2307.2 Approvals. Unless otherwise approved in accordance with the applicable building code, storage vessels and equipment for the storage or dispensing of LP-gas shall be maintained as approved or listed in accordance with Sections 2307.2.1 and 2307.2.2 and the applicable building code.

3. Delete Change Section 2307.2.1: to read:

2307.2.1 Approved equipment. Unless otherwise approved in accordance with the applicable building code, containers; pressure relief devices, including pressure relief valves; pressure regulators; and piping for LP-gas shall be approved in accordance with the applicable building code.

4. Delete Change Section 2307.2.2. to read:

2307.2.2 Listed equipment. Unless specifically approved otherwise in accordance with the applicable building code, hoses, hose connections, vehicle fuel connections, dispensers, LP-gas pumps, and electrical equipment for LP-gas shall be listed in accordance with the applicable building code.

5. Change Section 2307.3 to read:

2307.3 Attendants. Motor fuel-dispensing operations for LP-gas shall be conducted by qualified attendants or <u>in accordance with Section 2307.6</u> by persons trained in the proper handling of LP-gas.

6. Change Section 2307.4 to read:

(N)2307.4 2307.4 Location of dispensing operations and equipment. LP gas containers shall be located Unless specifically approved otherwise in accordance with the applicable building code, the point of transfer for LP-gas dispensing operations shall be 25 feet (7620 mm) or more from buildings having combustible exterior wall surfaces, buildings having noncombustible exterior wall surfaces that are not part of a one-hour fire-resistancerated assembly, or buildings having combustible overhangs, lot lines of property that could be built on, public streets, or sidewalks and railroads and at least 10 feet (3048 mm) from driveways and buildings having noncombustible exterior wall surfaces that are part of a fire-resistance-rated assembly having a rating of one hour or more. In no case should any of these provisions require demolition or relocation of existing equipment approved in accordance with the applicable building code.

Exception: The point of transfer for LP-gas dispensing operations need not be separated from canopies that are constructed in accordance with the applicable building code and that provide weather protection for the dispensing equipment. LP-gas containers shall remain located in accordance with Chapter 61 and the applicable building code. LP-gas storage and dispensing equipment shall be operated outdoors and in accordance with Section 2306.7 unless otherwise approved in accordance with the applicable building code.

7. Delete Change Section 2307.5- to read:

2307.5 Additional requirements for LP-gas dispensers and equipment. Unless specifically approved otherwise in accordance with the applicable building code, LP-gas dispensers and related equipment shall be maintained in accordance with the following provisions:

- 1. Pumps shall remain fixed in place and shall be maintained to allow control of the flow and to prevent leakage and accidental discharge.
- 2. Dispensing devices operated within 10 feet (3048 mm) of where vehicular traffic occurs shall be protected against physical damage by mounting on a concrete island 6 inches (152 mm) or more in height or shall be protected in accordance with Section 312.
- 3. Dispensing devices shall remain securely fastened to their mounting surface in accordance with the dispenser manufacturer's instructions.
- 8. Delete Change Section 2307.6. to read:

2307.6 Maintenance of LP-gas dispensing devices and equipment. LP-gas dispensing systems shall be maintained and remain in accordance with the applicable building code. The operation of LP-gas dispensing systems shall be in accordance with Sections 2307.6.1 through 2307.6.3 and Chapter 61. LP-gas dispensers and dispensing stations shall be maintained in accordance with the manufacturer's specifications and their listing.

9. Delete Change Section 2307.6.1- to read:

2307.6.1 Valves. Unless otherwise approved in accordance with the applicable building code, a manual shutoff valve and an excess flow-control check valve shall be maintained in the liquid line between the pump and the dispenser inlet where the dispensing device is installed at a remote location and is not part of a complete storage and dispensing unit mounted on a common base; an excess flow-control check valve or an emergency shutoff valve shall be maintained in or on the dispenser at the point at which the dispenser hose is connected to the liquid piping; a differential backpressure valve shall be considered equivalent protection; and a listed shutoff valve shall be maintained at the discharge end of the transfer hose.

10. Change Section 2307.6.2 to read:

(N)2307.6.2 2307.6.2 Hoses. Hoses Unless otherwise approved in accordance with the applicable building code, hoses and piping for the dispensing of LP-gas shall be maintained in accordance with the applicable building code. maintain hydrostatic relief valves. Hose length for dispensing operations shall not exceed 18 feet (5486 mm). An approved method shall be maintained to protect the hose against mechanical damage.

- 11. Delete Section Change Sections 2307.6.3- and 2307.6.4 to read:
  - 2307.6.3 Emergency breakaway devices. Unless otherwise approved in accordance with the applicable building code, a listed emergency breakaway device to retain liquid on both sides of the breakaway point shall be maintained on dispensing hoses. Where hoses are attached to hose-retrieving mechanisms, the emergency breakaway device shall be maintained such that the breakaway device activates to protect the dispenser from being displaced.
  - 2307.6.4 Vehicle impact protection. Where operated within 10 feet of vehicle traffic, LP-gas storage containers, pumps and dispensers shall maintain protection in accordance with Section 2307.5, Item 2, unless otherwise approved in accordance with the applicable building code.

## 12. Change Section 2307.7 to read:

- (N)2307.7 2307.7 Public fueling of motor vehicles. Self-service LP-gas dispensing systems, including key, code, and card lock dispensing systems, shall be limited to the filling of permanently mounted containers providing fuel to the LP-gas powered vehicle. The requirements for self-service LP-gas dispensing systems shall be in accordance with the following:
- 1. The arrangement and operation of the transfer of product into a vehicle shall be in accordance with this section and Chapter 61.
- 2. The system shall maintain an emergency shut-off switch located in accordance with the applicable building code.
- <u>3.</u> The owner of the LP-gas motor fuel-dispensing facility or the owner's designee shall provide for the safe operation of the system and the training of users.
- 4. Unless otherwise approved in accordance with the applicable building code, the dispenser and hose-end valve shall release not more than 1/8 fluid ounce (4 cc) of liquid to the atmosphere upon breaking the connection with the fill valve on the vehicle.
- 3. 5. Portable fire extinguishers shall be provided in accordance with Section 2305.5.
- 4. <u>6.</u> Warning signs shall be provided in accordance with Section 2305.6.
- 5. 7. The area around the dispenser shall be maintained in accordance with Section 2305.7.
- G. The following changes shall be made to Section 2308, Compressed Natural Gas Motor Fuel-Dispensing Facilities:
  - 1. Change Section Sections 2308.1 through 2308.3.1 to read:

- 2308.1 General. Motor fuel-dispensing facilities for compressed natural gas (CNG) fuel shall be maintained and remain in accordance with the applicable building code. Such facilities shall be operated and maintained in accordance with this section and Chapter 53.
- 2308.2 Approvals. Unless otherwise approved in accordance with the applicable building code, storage vessels and equipment used for the storage, compression, or dispensing of CNG shall be approved or listed in accordance with Sections 2308.2.1 and 2308.2.2 and the applicable building code.
- 2308.2.1 Approved equipment. Containers, compressors, pressure relief devices (including pressure relief valves), and pressure regulators and piping used for CNG shall be approved.
- 2308.2.2 Listed equipment. Hoses, hose connections, dispensers, gas detection systems, and electrical equipment used for CNG shall be maintained in accordance with their listing. Vehicle-fueling connections shall be listed and labeled in accordance with the applicable building code.
- 2308.3 Location of dispensing operations and equipment. Unless approved otherwise in accordance with the applicable building code and Chapter 53, compression, storage, and dispensing equipment shall be located above ground and outside.

## 2. Change Section 2308.2.2 to read:

(N)2308.2.2 Listed equipment. Hoses, hose connections, dispensers, gas detection systems, and electrical equipment used for CNG shall be listed. Vehicle fueling connections shall be listed and labeled and maintained in accordance with the applicable building code.

#### 3. Delete Section 2308.3.

## 4. Delete Section

- 2308.3.1. Location of operations on property. Unless otherwise approved in accordance with the applicable building code, compression, storage, and dispensing equipment not located in vaults complying with Chapter 53 shall be maintained and operated in accordance with Section 2303.1 and the following. In no case should any of these provisions require demolition or relocation of existing equipment when approved in accordance with the applicable building code.
- 1. Not beneath power lines.
- 2. Ten feet (3048 mm) or more from the nearest building or lot line that could be built on, public street, sidewalk, or source of ignition.

Exception: Dispensing equipment need not be separated from canopies that are constructed in accordance with the

applicable building code and that provide weather protection for the dispensing equipment.

- 3. Twenty-five feet (7620 mm) or more from the nearest rail of any railroad track and 50 feet (15,240 mm) or more from the nearest rail of any railroad main track or any railroad or transit line where power for train propulsion is provided by an outside electrical source, such as third rail or overhead catenary.
- 4. Fifty feet (15,240 mm) or more from the vertical plane below the nearest overhead wire of a trolley bus line.
- 5. 2. Change Section 2308.5 to read:

(N)2308.5 2308.5 Pressure regulators. Pressure Unless otherwise approved in accordance with the applicable building code, pressure regulators shall be maintained in accordance with the applicable building code. so that their operation will not be affected by the elements (freezing rain, sleet, snow, or ice), mud, or debris. The protection is allowed to be an integral part of the regulator.

6. 3. Change Section 2308.6 to read:

(N)2308.6 2308.6 Valves. Gas piping to equipment shutoff valves shall be maintained Unless otherwise approved in accordance with the applicable building code, the remote, readily accessible manual shutoff valve shall be maintained.

7. 4. Change Section 2308.7 to read:

(N)2308.7 2308.7 Emergency shutdown control. Emergency shutdown controls shall be maintained and remain within 75 feet (22,860 mm) of, but not less than 25 feet (7620 mm) from, dispensers as well as in the compressor area unless otherwise approved in accordance with the applicable building code. Where provided, and upon activation, the emergency shutdown system shall be maintained to automatically shut off the power supply to the compressor and close valves between the main gas supply and the compressor and between the storage containers and dispensers.

- H. The following changes shall be made to Section 2309, Hydrogen Motor Fuel-Dispensing and Generation Facilities:
  - 1. Change Section 2309.1 to read:

2309.1 General. Operation and maintenance of hydrogen motor fuel dispensing and generation facilities shall be in accordance with this section and other applicable provisions of this code. Hydrogen motor fuel-dispensing facilities shall be maintained and remain in accordance with the applicable building code. Such facilities shall be operated and maintained in accordance with this section and Chapter 58. Where a fuel-dispensing facility includes a repair garage, the repair operation shall comply with Section 2311.

2. Change Section 2309.2 to read:

(N)2309.2 2309.2 Equipment. Equipment Unless otherwise approved in accordance with the applicable building code, equipment used for the generation, compression, storage, or dispensing of hydrogen shall be maintained or the specific application in accordance with the applicable building code Sections 2309.2.1 through 2309.2.3.

3. Change Section 2309.2.1 to read:

(N)2309.2.1 2309.2.1 Approved equipment. Cylinders Unless otherwise approved in accordance with the applicable building code, cylinders, containers, and tanks; pressure relief devices, including pressure valves; hydrogen vaporizers; pressure regulators; and piping used for gaseous hydrogen systems shall be maintained in accordance with the applicable building code Chapters 53, 55, and 58.

4. Change Section 2309.2.2 to read:

(N)2309.2.2 2309.2.2 Listed or approved equipment. Hoses Unless otherwise approved in accordance with the applicable building code, hoses, hose connections, compressors, hydrogen generators, dispensers, detection systems, and electrical equipment used for hydrogen shall be maintained as listed and labeled or approved for use with hydrogen and maintained in accordance with the applicable building code.

5. Change Section 2309.2.3 to read:

(N)2309.2.3 2309.2.3 Electrical equipment. Electrical installations shall be maintained <u>and remain</u> in accordance with the applicable building code. <u>Portable or temporary electrical equipment shall be in accordance with NFPA 70.</u>

6. Change Section 2309.3 to read:

(N)2309.3 2309.3 Location on property. Location of dispensing equipment shall be maintained in accordance with the applicable building code. Unless otherwise approved in accordance with the applicable building code, dispensing equipment operations shall remain located in accordance with the applicable building code and maintained in accordance with Section 2303.1 and Sections 2309.3.1 through 2309.3.2.

7. Change Section 2309.1.1 2309.3.1.1 to read:

(N)2309.3.1.1 2309.3.1.1 Outdoors. Generation, compression, or storage equipment shall be <u>allowed</u> <u>outdoors where</u> maintained in accordance with <u>Chapter</u> 58 and NFPA 2 or the applicable building code.

8. Change Section 2309.3.1.2 to read:

(N)2309.3.1.2 2309.3.1.2 Indoors. Generation, compression, storage and dispensing equipment shall be

maintained in accordance with the applicable building eode. operations located in indoor rooms or other approved areas shall remain in accordance with the requirements of the applicable building code and the maintenance provisions of NFPA 2, including ventilation.

9. Change Section 2309.3.1.3 to read:

(N)2309.3.1.3 2309.3.1.3 Gaseous hydrogen storage. Storage Unless otherwise approved in accordance with the applicable building code, storage of gaseous hydrogen shall be maintained in accordance with the applicable building code Chapters 53 and 58.

10. Change Section 2309.3.1.4 to read:

(N)2309.3.1.4 2309.3.1.4 Liquefied hydrogen storage. Storage Unless otherwise approved in accordance with the applicable building code, storage of liquefied hydrogen shall be maintained in accordance with the applicable building code Chapters 55 and 58.

11. Change Section 2309.3.1.5 to read:

(N)2309.3.1.5 2309.3.1.5 Canopy tops. Gaseous Unless otherwise approved in accordance with the applicable building code, gaseous hydrogen compression and storage equipment operations located on top of motor fuel-dispensing facility canopies shall be maintained in accordance with the applicable building code. Sections 2309.3.1.5.1 through 2309.3.1.5.5, Chapters 53 and 58, and the applicable building code.

Note: Canopy methods and materials require special conditions that must be maintained in accordance with the applicable building code.

- 12. Delete Section 2309.3.1.5.1.
- 13. Change Section 2309.3.1.5.2 to read:

(N)2309.3.1.5.2 2309.3.1.5.2 Fire-extinguishing systems. Fire-extinguishing systems provided for fuel-dispensing areas under canopies shall be maintained in accordance with Chapter 9 and remain in accordance with the applicable building code.

14. Delete Change Section 2309.3.1.5.3- to read:

2309.3.1.5.3 Emergency discharge. Where provided, operation of the fire-extinguishing system shall be maintained to activate an automatic emergency discharge system that will discharge the hydrogen gas from the equipment on the canopy top through the vent pipe system.

15. Delete Change Section 2309.3.1.5.4. to read:

2309.3.1.5.4 Emergency shutdown control. Where provided, operation of the fire extinguishing system shall

<u>be maintained to activate the emergency shutdown</u> control required to be maintained by Section 2309.5.3.

- 16. Delete Section 2309.3.2.
- 17. Change Section 2309.4.1 to read:

(N)2309.4.1 2309.4.1 Dispensing systems. Dispensing systems shall be maintained in accordance with the applicable building code. Unless otherwise approved in accordance with the applicable building code, dispensing systems with an overpressure protection device shall be maintained set at 140% of the service pressure of the fueling nozzle it supplies.

18. Change Section 2309.5 to read:

(N)2309.5 2309.5 Safety precautions. Safety precautions at hydrogen motor fuel-dispensing and generation facilities shall be in accordance with Sections 2309.5.1 through 2309.5.3 2309.5.3.1.

19. Change Section 2309.5.2 to read:

(N)2309.5.2 2309.5.2 Emergency shutoff valves. Manual emergency shutoff valves shall be maintained in accordance with the applicable building code. Unless otherwise approved in accordance with the applicable building code, a manual emergency shutoff valve to shut down the flow of gas from the hydrogen supply to the piping system shall be maintained.

20. Change Section 2309.5.3 to read:

(N)2309.5.3 2309.5.3 Emergency shutdown controls. Emergency shutdown controls shall be maintained Unless otherwise approved in accordance with the applicable building code, a remotely located, manually activated shutdown control shall be maintained in addition to the manual emergency shutoff valve referenced by Section 2309.5.2. This emergency shutdown control shall be maintained within 75 feet (22,860 mm) of, but not less than 25 feet (7620 mm) from, dispensers and hydrogen generators unless otherwise approved by the applicable building code.

21. Delete Change Section 2309.5.3.1- to read:

2309.5.3.1 System requirements. Unless otherwise approved in accordance with the applicable building code, activation of the emergency shutdown control shall be maintained to automatically shut off the power supply to all hydrogen storage, compression, and dispensing equipment; shut off natural gas or other fuel supply to the hydrogen generator; and close valves between the main supply and the compressor and between the storage containers and dispensing equipment.

22. Change Section 2309.6 to read:

2309.6 Repairs, purging, defueling, and discharge. The purging, defueling, or discharge activities associated with

hydrogen motor fuel supply systems and tanks shall be in accordance with Chapters 53 and 58 and NFPA 2.

Exception: The fuel supply piping from the fuel storage tank to the engine compartment on a motor vehicle or forklift.

Change Section 2309.6.1.2.1.2 to read:

(N)2309.6.1.2.1.2 Vent pipe maximum diameter. Vent pipe diameter shall be maintained in accordance with the applicable building code.

23. Change Section 2309.6.1.2.1.3 to read:

(N)2309.6.1.2.1.3 Maximum flow rate. The maximum rate of hydrogen flow through the vent pipe system shall be maintained in accordance with the applicable building code.

- 24. Delete Section 2309.6.1.2.2.
- 25. Delete Section 2309.6.1.2.3.
- 26. Change Section 2309.6.1.2.4 to read:

(N)2309.6.1.2.4 Grounding and bonding. Grounding and bonding of cylinders, containers or tanks, and piping shall be maintained in accordance with the applicable building code.

27. Change Section 2309.6.2 to read:

(N)2309.6.2 Repair of hydrogen piping. Piping systems containing hydrogen shall not be opened to the atmosphere for repair without first purging the piping with an inert gas to achieve 1% hydrogen or less by volume.

- I. The following changes shall be made to Section 2310, Marine Motor Fuel-Dispensing Facilities:
  - 1. Change Section 2310.1 to read:

2310.1 General. The construction of marine motor fuel-dispensing facilities shall be in accordance with this section and other applicable provisions of this code. Marine motor fuel-dispensing facilities shall be maintained and remain in accordance with the applicable building code and the maintenance provisions of NFPA 30A. The storage of Class I, II, or IIIA liquids at marine motor fuel-dispensing facilities shall be maintained in accordance with this chapter and Chapter 57.

2. Change Section 2310.2 to read:

(N)2310.2 2310.2 Storage and handling. The storage and handling of Class I, II, or IIIA liquids at marine motor fuel-dispensing facilities shall be maintained in accordance with the applicable building code Sections 2310.2.1 through 2310.2.3.

3. Change Section 2310.2.1 to read:

(N)2310.2.1 2310.2.1 Class I, II, or IIIA liquid storage. Unless otherwise approved in accordance with the applicable building code, Class I, II, or IIIA liquids stored inside of buildings used for marine motor fuel-dispensing facilities shall be stored in accordance with the applicable building code approved containers or portable tanks. Storage of Class I liquids shall not exceed 10 gallons (38 L).

Exception: Storage in liquid storage rooms in accordance with the applicable building code.

4. Change Section 2310.2.2 to read:

(N)2310.2.2 2310.2.2 Class II or IIIA liquid storage and dispensing. Unless specifically approved otherwise in accordance with the applicable building code, Class II, or IIIA liquids stored or dispensed inside of buildings used for marine motor fuel-dispensing facilities shall be stored in and dispensed in accordance with the applicable building code from approved containers or portable tanks. Storage of Classes II and IIIA liquids shall be maintained to not exceed 120 gallons (454 L).

5. Change Section 2310.2.3 to read:

(N)2310.2.3 2310.2.3 Heating equipment. Heating equipment installed in Class I, II, or IIIA liquid storage or dispensing areas shall be maintained in accordance with the applicable building code comply with Section 2301.6.

6. Change Section 2310.2.3.3 to read:

(N)2310.3.3 2310.3.3 Hoses and nozzles. Hoses and nozzles shall be maintained in accordance with the applicable building code. Unless otherwise approved in accordance with the applicable building code, dispensing of Class I, II, or IIIA liquids into the fuel tanks of marine craft shall be by means of an approved-type hose equipped with a listed automatic-closing nozzle without a latch-open device. Hoses used for dispensing or transferring Class I, II, or IIIA liquids, when not in use, shall be reeled, racked, or otherwise protected from mechanical damage.

7. Change Section 2310.3.5 to read:

(N)2310.3.5 2310.3.5 Liquefied petroleum gas. Liquefied petroleum gas cylinders shall not be filled at marine motor fuel-dispensing facilities unless approved. Approved storage facilities for LP-gas cylinders shall be provided. See also Section 2307.

8. Change Section 2310.6 to read:

(N)2310.6 2310.6 Fire protection. Fire protection features for marine motor fuel-dispensing facilities shall be maintained in accordance with the applicable building

eode with Sections 2310.6.1 through 2310.6.4 and remain in accordance with the applicable building code.

- J. The following changes shall be made to Section 2311, Repair Garages:
  - 1. Change Section 2311.1 to read:

2311.1 General. Operation and maintenance of repair garages shall eomply be in accordance with this section and other applicable provisions of this code. Repair garages for vehicles that use more than one type of fuel shall comply with the applicable provisions of this section for each type of fuel used.

Where a repair garage includes a motor fuel-dispensing facility, the fuel-dispensing operation shall comply with the requirements of this chapter for motor fuel-dispensing facilities.

2. Change Section 2311.2 to read:

(N)2311.2 2311.2 Storage and use of flammable and combustible liquids. The storage and use of flammable and combustible liquids in repair garages shall be maintained in accordance with Chapter 57 and Sections 2311.2.1 through 2311.2.4 and remain in accordance with the applicable building code.

3. Change Section 2311.2.3 to read:

(N)2311.2.3 2311.2.3 Drainage and disposal of liquids and oil soaked waste. Contents of oil separators, traps and floor drainage systems shall be collected at sufficiently frequent intervals and removed from the premises to prevent oil from being carried into the sewers.

4. Change Section 2311.3.1 to read:

(N)2311.3.1 2311.3.1 Equipment. Appliances and equipment installed in a repair garage shall be maintained in accordance with <u>Chapter 6</u>, the applicable building code, and the maintenance provisions of NFPA 70.

5. Change Section 2311.4 to read:

(N)2311.4 2311.4 Below-grade areas. Pits and below-grade work areas in repair garages shall be maintained in accordance with the applicable building code comply with Sections 2311.4.1 through 2311.4.3.

- 6. Delete Section 2311.4.1.
- 7. Change Section 2311.4.2 to read:

(N)2311.4.2 2311.4.2 Means of egress. Means of egress for pits and below-grade work areas shall be maintained in accordance with Chapter 10 and in accordance with the applicable building code.

8. Change Section 2311.4.3 to read:

(N)2311.4.3 2311.4.3 Ventilation. Where Class I liquids or LP-gas are stored or used within a building having a basement or pit wherein flammable vapors could accumulate, the basement or pit mechanical ventilation, where provided, shall be maintained in accordance with the applicable building code to prevent the accumulation of flammable vapors.

9. Change Section 2311.7.1 to read:

(N)2311.7.1 2311.7.1 Ventilation. Ventilation required for repair garages used for the repair of natural gastueled vehicles or hydrogen-fueled vehicles shall be maintained in accordance with the applicable building code.

Exception: Repair garages with natural ventilation when approved.

10. Delete Section 2311.7.1.1.

11. Change Section 2311.7.1.2 to read:

(N)2311.7.1.2 Operation. The mechanical ventilation system shall be maintained in accordance with the applicable building code.

10. Change Section 2311.8 and Sections 2311.8.2 through 2311.8.8 and delete Section 2311.8.6.

Section 2311.8 and Sections 2311.8.2 through 2311.8.8 to read:

2311.8 Repair garages for vehicles fueled by lighter-than-air fuels. The room, motor vehicle repair booth, or motor vehicle repair space containing repair garage activities for the conversion or repair of vehicles that use CNG, LNG, hydrogen, or other lighter-than-air motor fuels shall be in accordance with the applicable building code and Sections 2311.8 through 2311.8.11 in addition to the other requirements of Section 2311. Repair garages for the repair of vehicles that use hydrogen fuel shall be in accordance with this code, the applicable building code, and NFPA 2.

- 1. Repair garages where work is conducted only on vehicles that have been defueled and their systems purged with nitrogen gas and where standard operating procedures to document and maintain the fueling status throughout repair operations are approved.
- 2. Repair garages where work is not performed on the fuel system and is limited to exchange of parts and maintenance not requiring open flame or welding on the CNG-fueled, LNG-fueled, hydrogen-fueled, or other lighter-than-air-fueled motor vehicle.

- 3. Repair garages for hydrogen-fueled vehicles where work is not performed on the hydrogen storage tank and is limited to the exchange of parts and maintenance not requiring open flame or welding on the hydrogen-fueled vehicle. During the work, the entire hydrogen fuel system shall contain less than 200 cubic feet (5.6 m³) of hydrogen.
- 4. Repair garages for natural-gas-fueled vehicles where work is not being performed on the fuel storage tank and is limited to the exchange of parts and maintenance not requiring open flame or welding on the natural-gas-fueled vehicle. During the work, the natural gas in the vehicle fuel tank shall contain a pressure of not more than 250 psi at 70°F (1724 kPa at 21°C).
- 2311.8.2 Repair garages used for the repair of hydrogen-fueled vehicles. Repair garages used for the repair of hydrogen-fueled vehicles are required to be provided with an approved exhaust ventilation system in accordance with the applicable building code and maintained in accordance with Chapter 6 of NFPA 2.
- 2311.8.3 Motor vehicle repair rooms. Motor vehicle repair rooms shall maintain fire-resistance-rated separation from adjacent areas in accordance with Chapter 7 and the applicable building code.
- 2311.8.4 Motor vehicle repair booths. The maintenance and operation of motor vehicle repair booths shall be in accordance with Sections 2311.8.4.1 through 2311.8.4.4.
- 2311.8.4.1 Construction. Motor vehicle repair booths shall be maintained with approved materials in accordance with the applicable building code. Structural sections of motor vehicle repair booths shall remain sealed in an approved manner.
- 2311.8.4.2 Surfaces. The interior surfaces of motor vehicle repair booths shall be maintained to permit the free passage of exhaust air from all parts of the interior.
- 2311.8.4.3 Means of egress. Means of egress shall be maintained in accordance with Chapter 10 and the applicable building code.
- NOTE: Means of egress doors from premanufactured motor vehicle repair booths shall be in accordance with manufacturer's specifications.
- 2311.8.4.4 Clear space. Unless otherwise approved by the applicable building code, motor vehicle repair booths shall be maintained so that all parts of the booth provide ready access for cleaning. A clear area not less than 3 feet (914 mm) wide shall be maintained on all sides of the motor vehicle repair booth. This clear area shall be kept free of any storage or combustible construction.

#### **Exceptions:**

- 1. This requirement shall not prohibit locating a motor vehicle repair booth closer than 3 feet (914 mm) to or directly against an interior partition, wall, or floor and ceiling assembly that has a fire-resistance rating of not less than one hour in accordance with the applicable building code, provided that the motor vehicle repair booth can be adequately maintained and cleaned.
- 2. This requirement shall not prohibit locating a motor vehicle repair booth closer than 3 feet (914 mm) to an exterior wall or a roof assembly, provided that the wall or roof is maintained of noncombustible material in accordance with the applicable building code and the motor vehicle repair booth can be adequately maintained and cleaned.
- 2311.8.5 Motor vehicle repair spaces. Where such spaces are not separately enclosed, noncombustible spray curtains shall be maintained and used to restrict the spread of flammable gases in accordance with the applicable building code.
- 2311.8.7 Fire extinguishers. Portable fire extinguishers complying with Section 906 shall be provided and maintained for motor vehicle repair rooms, motor vehicle repair booths, or motor vehicle repair spaces.
- 2311.8.8 Ventilation. Exhaust ventilation system. Where required by the applicable building code, repair garages used for the repair of CNG, LNG, or other lighter-thanair motor fuels other than hydrogen shall be maintained and operated with an approved mechanical ventilation system. The mechanical exhaust ventilation system shall be in accordance with the applicable building code and Sections 2311.8.8.1 and 2311.8.8.2.

Where approved by the applicable building code, natural ventilation shall be permitted in lieu of mechanical exhaust ventilation.

- 12. 11. Delete Section 2311.8.8.1.
- 12. Change Section 2311.7.2 2311.8.8.2 to read:
- 2311.8.8.2 Operation. Where required by the applicable building code, the mechanical exhaust ventilation system shall operate continuously.

- 1. Mechanical exhaust ventilation systems that are interlocked with a gas detection system designed in accordance with Sections 2311.8.9 through 2311.8.9.2.
- 2. Mechanical exhaust ventilation systems in repair garages that are used only for repair of vehicles fueled by liquid fuels or odorized gases, such as CNG, where the ventilation system is electrically interlocked with the lighting circuit.

- 13. Change Sections 2311.8.9, 2311.8.9.1, and 2311.8.9.2 to read:
  - (N)2311.7.2 2311.8.9 Gas detection system. Gas detection systems required for Where required by the applicable building code, repair garages used for repair of vehicles fueled by nonodorized gases, including hydrogen and nonodorized liquefied natural gas, shall be maintained in accordance with the applicable building code (LNG) the gas detection system shall be maintained. Where lubrication or chassis service pits are provided in garages used for repairing nonodorized LNG-fueled vehicles, gas sensors shall be maintained and operated in such pits.
  - 2311.8.9.1 System activation. Required systems shall be maintained and operated as approved to result in all of the following if required by the applicable building code:
  - 1. Initiation of local audible and visual alarms in approved locations.
  - 2. Deactivation of heating systems located in the repair garage.
  - 3. Activation of the mechanical exhaust ventilation system where the ventilation system is interlocked with gas detection.
  - 2311.8.9.2 Failure of the gas detection system. Unless otherwise permitted by the applicable building code, failure of the gas detection system shall automatically deactivate the heating system, activate the mechanical exhaust ventilation system where the system is interlocked with the gas detection system, and cause a trouble signal to sound in an approved location.
- 13. Delete Section 2311.7.2.1.
- 14. Delete Section 2311.7.2.1.1.
- 15. Delete Section 2311.7.2.2.
- 16. Delete Section 2311.7.2.3.
- 14. Change Sections 2311.8.10 and 2311.8.11 to read:
  - 2311.8.10 Classified electrical area. Classified electrical areas within 18 inches (450 mm) of a ceiling shall be maintained in accordance with the applicable building code and free of electrical hazards.
  - 2311.8.11 Defueling equipment required at vehicle maintenance and repair facilities. Facilities for repairing or replacing hydrogen fuel tanks on hydrogen-fueled vehicles shall have equipment to defuel vehicle storage tanks. Where work must be performed on a vehicle's fuel storage tank for the purpose of maintenance, repair or cylinder certification, defueling, and purging shall be conducted in accordance with Section 2309.6 and NFPA 2.

#### 13VAC5-51-140.5. IFC Chapter 24 Flammable Finishes.

A. The following change shall be made to Section 2401, General:

Change Section 2401.3 to read:

- 2401.3 Permits. Permits shall be required as set forth in Section 107.2.
- B. The following changes shall be made to Section 2403, Protection of Operations:
  - 1. Change Section 2403.2.1 to read:
  - (N)2403.2.1 2403.2.1 Electrical wiring and equipment. Electrical wiring and equipment shall be maintained in accordance with this chapter, the applicable building code, the applicable provisions of NFPA 70, and Chapter 6.
  - 2. Change Section 2403.2.1.1 to read:
    - (N)2403.2.1.1 2403.2.1.1 Flammable vapor areas. Electrical wiring and equipment in flammable vapor areas shall be of an explosion proof type approved for use in such hazardous locations and maintained in accordance with the applicable building code as classified by the applicable building code and shall be maintained in accordance with the applicable provisions of NFPA 70 and Chapter 6.
  - 3. Change Section 2403.2.1.2 to read:
    - (N)2403.2.1.2 2403.2.1.2 Areas subject to deposits of residues. Flammable Electrical equipment, flammable vapor areas, or drying operations that are subject to splashing or dripping of liquids shall be specifically approved for locations containing deposits of readily ignitable residue and explosive vapors.

- 1. The provision shall not apply to wiring in rigid conduit, threaded boxes, or fittings not containing taps, splices, or terminal connections.
- 2. This provision shall not apply to electrostatic equipment allowed by Section 2407.
- In resin application areas, electrical wiring and equipment that is subject to deposits of combustible residues shall be listed for such exposure and shall be installed as required for hazardous (classified) locations. Electrical wiring and equipment not subject to deposits of combustible residues shall be installed as required for ordinary hazard locations.
- 4. Change Section 2403.2.1.3 to read:
  - (N)2403.2.1.3 2403.2.1.3 Areas adjacent to spray booths. Electrical Unless otherwise approved by the applicable building code, electrical wiring and equipment located

outside of, but within 5 feet (1524 mm) horizontally and 3 feet (914 mm) vertically of, openings in a spray booth or a spray room shall be maintained in accordance with the applicable building code.

5. Change Section 2403.2.5 to read:

(N)2403.2.5 2403.2.5 Grounding. The grounding of metal Metal parts of spray booths, exhaust ducts, and piping systems conveying Class I or II liquids shall be maintained in accordance with the applicable building code electrically grounded in accordance with NFPA 70. Metallic parts located in resin application areas, including exhaust ducts, ventilation fans, spray application equipment, workpieces, and piping, shall be electrically grounded.

- C. The following changes shall be made to Section 2404, Spray Finishing:
  - 1. Change Section 2404.1 to read:

(N)2404.1 2404.1 General. The application of flammable or combustible liquids by means of spray apparatus in continuous or intermittent processes shall be in accordance with the requirements of Sections 2403 and 2404.

2. Delete Change Section 2404.2. to read:

2404.2 Location of spray-finishing operations. Unless otherwise approved by the applicable building code, spray finishing operations shall not be conducted in buildings used for Group A, E, I, or R occupancies except where approved in accordance with the applicable building code. In other occupancies, spray-finishing operations shall be conducted in a spray room, spray booth, or spraying space approved for such use where required by the applicable building code.

#### Exceptions:

- 1. Automobile undercoating spray operations and sprayon automotive lining operations conducted in areas with approved natural or mechanical ventilation shall be exempt from the provisions of Section 2404 when approved and where utilizing Class IIIA or IIIB combustible liquids.
- 2. In buildings other than Group A, E, I, or R occupancies, approved limited spraying space in accordance with Section 2404.9.
- 3. Resin application areas used for manufacturing of reinforced plastics complying with Section 2409 shall not be required to be located in a spray room, spray booth, or spraying space.
- 3. Delete Change Section 2404.3- to read:

2404.3 Design and construction. Design and construction of spray rooms, spray booths, and spray spaces shall be

in accordance with the applicable building code. These areas shall be maintained in accordance with Sections 2404.3 through 2404.3.3.

4. Change Section 2404.3.1 to read:

(N)2404.3.1 2404.3.1 Spray rooms. Spray rooms shall be maintained in accordance with this section and remain in accordance with the applicable building code.

5. Change Section <u>2404.3.1.1</u> <u>2404.3.2</u> to read:

(N)2404.3.1.1 2404.3.2 Floor. Combustible floor construction in spray rooms shall be maintained in accordance with the applicable building code. covered by approved, noncombustible, nonsparking material, except where combustible coverings, including thin paper or plastic and strippable coatings, are utilized over noncombustible materials to facilitate cleaning operations in spray rooms.

6. Change Section 2404.3.2 2404.3.3 to read:

(N)2404.3.2 2404.3.3 Spray booths. Spray booths shall be maintained in accordance with the applicable building code. The design and construction of spray booths shall be in accordance with the applicable building code and maintained in accordance with Sections 2404.3.3.1 through 2403.3.6 and Sections 2404.4 through 2404.8 and the applicable sections of NFPA 33.

- 7. Delete Section 2404.3.2.1 2404.3.3.1.
- 8. Change Section 2404.3.2.2 to read:

(N)2404.3.2.2 2404.3.2.2 Surfaces. The interior surfaces of spray booths shall be maintained in accordance with the applicable building code smooth; shall be maintained so as to permit the free passage of exhaust air from all parts of the interior and to facilitate washing and cleaning; and shall be maintained to confine residues within the booth. Aluminum shall not be used unless approved by the applicable building code.

9. Change Section <del>2404.3.2.3</del> 2404.3.3.3 to read:

(N)2404.3.2.3 2404.3.3.3 Floor covering. Combustible floor construction in spray booths shall be maintained in accordance with the applicable building code covered by approved, noncombustible, nonsparking material, except where combustible coverings, including thin paper or plastic and strippable coatings, are utilized over noncombustible materials to facilitate cleaning operations in spray booths

10. Change Section 2404.3.2.4 2404.3.3.4 to read:

(N)2404.3.2.4 2404.3.3.4 Means of egress. Means of egress shall be maintained in accordance with the applicable building code and Chapter 10.

#### 11. Change Section 2404.3.2.5 2404.3.3.5 to read:

(N)2404.3.2.5 2404.3.3.5 Clear space. A Spray booths shall be maintained so that all parts of the booth are readily accessible for cleaning. Unless otherwise approved by the applicable building code, a clear space of not less than 3 feet (914 mm) shall be maintained on all sides of the spray booth. This clear space shall be kept free of any storage or combustible construction. If approved in accordance with the applicable building code, the following exceptions may apply:

- 1. This requirement shall not prohibit locating a spray booth closer than 3 feet (914 mm) to or directly against an interior partition, wall, or floor and ceiling assembly that has a fire-resistance rating of not less than one hour, provided the spray booth can be adequately maintained and cleaned.
- 2. This requirement shall not prohibit locating a spray booth closer than 3 feet (914 mm) to an exterior wall or a roof assembly, provided the wall or roof is constructed of noncombustible material and the spray booth can be adequately maintained and cleaned.
- 12. Delete Section 2404.3.2.6 2404.3.3.6.
- 13. Change Section <u>2404.3.3</u> <u>2404.3.4</u> to read:

(N)2404.3.3 2404.3.4 Spraying spaces. Spraying spaces shall be maintained The design and construction of spray booths shall be in accordance with the applicable building code and maintained in accordance with Section 2404.3.3.1 and Sections 2404.4 through 2404.8.

14. Change Section 2404.3.3.1 2404.3.4.1 to read:

(N)2404.3.3.1 2404.3.4.1 Floor covering. Combustible floor construction in spraying spaces shall be maintained in accordance with the applicable building code covered by approved, noncombustible, nonsparking material, except where combustible coverings, such as thin paper or plastic and strippable coatings, are utilized over noncombustible materials to facilitate cleaning operations in spraying spaces.

15. Change Section 2404.4 to read:

(N)2404.4 2404.4 Fire protection. Automatic <u>Unless</u> otherwise permitted by the applicable building code, spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing systems provided for spray booths shall be maintained in accordance with the applicable building code system complying with the requirements of the applicable building code and maintained in accordance with Chapter 9.

16. Change Section 2404.6.2.1 to read:

(N)2404.6.2.1 2404.6.2.1 Glass panels. Panels for luminaires or for observation shall be maintained in

accordance with the applicable building code maintain seals to confine vapors, mists, residues, dusts, and deposits to the flammable vapor area. Panels for luminaires shall be separated from the luminaire to prevent the surface temperature of the panel from exceeding 200°F (93°C).

#### 17. Change Section 2404.6.2.2 to read:

(N)2404.6.2.2 2404.6.2.2 Exterior luminaires. Luminaires attached to the walls or ceilings of a flammable vapor area, but outside of any classified area and separated from the flammable vapor areas by vaportight glass panels, shall be maintained in accordance with the applicable building code suitable for use in ordinary hazard locations. Such luminaires shall be serviced from outside the flammable vapor areas.

#### 18. Change Section 2404.6.2.3 to read:

(N)2404.6.2.3 2404.6.2.3 Integral luminaires. Luminaires that are an integral part of the walls or ceiling of a flammable vapor area are allowed to be separated from the flammable vapor area by glass panels that are an integral part of the luminaire. Such luminaires shall be maintained in accordance with the applicable building code used only if listed for use in hazardous locations in accordance with the applicable building code and also shall be suitable for accumulations of deposits of combustible residues. Such luminaires are allowed to be serviced from inside the flammable vapor area.

19. Change Section 2404.7 to read:

(N)2404.7 2404.7 Ventilation. Mechanical ventilation of flammable vapor areas shall be maintained <u>and operated</u> in accordance with the applicable building code.

20. Change Section 2404.7.1 to read:

(N)2404.7.1 2404.7.1 Operation. Where provided, mechanical ventilation shall be kept in operation at all times while spraying operations are being conducted and for a sufficient time thereafter to allow vapors from drying coated articles and finishing material residue to be exhausted.

- 21. <del>Delete</del> Change Section <del>2404.7.2.</del> 2404.7.2 to read:
  - 2404.7.2 Recirculation. Air exhausted from spraying operations shall not be recirculated unless otherwise permitted by the applicable building code.
- 22. Change Section 2404.7.3 to read:

(N)2404.7.3 2404.7.3 Air velocity. The required air velocity for ventilation systems shall be maintained in accordance with the applicable building code.

23. Change Section 2404.7.3.1 to read:

(N)2404.7.3.1 2404.7.3.1 Open-face or open-front spray booth. For spray application operations conducted in an open-face or open-front spray booth, the ventilation system <u>air velocity</u> shall be maintained in accordance with the requirements of the applicable building code.

24. Change Section 2404.7.3.2 to read:

(N)2404.7.3.2 2404.7.3.2 Enclosed spray booth or spray room with openings for product conveyance. For spray application operations conducted in an enclosed spray booth or spray room with openings for product conveyance, the ventilation system shall be maintained in accordance with the applicable building code.

- 25. Delete Section 2404.7.5.
- 26. Change Section 2404.7.6 to read:

(N)2404.7.6 2404.7.6 Termination point. The <u>Unless</u> otherwise permitted by the applicable building code, the termination point for exhaust ducts discharging to the atmosphere shall be maintained in accordance with the applicable building code. to be not less than the distances listed as follows. Termination locations at less than these distances shall be evaluated by the building official for compliance in accordance with the applicable building code.

- 1. Ducts conveying explosive or flammable vapors, fumes, or dusts: 30 feet (9144 mm) from the lot line; 10 feet (3048 mm) from openings into the building; 6 feet (1829 mm) from exterior walls and roofs; 30 feet (9144 mm) from combustible walls or openings into the building that are in the direction of the exhaust discharge; and 10 feet (3048 mm) above adjoining grade.
- 2. Other product-conveying outlets: 10 feet (3048 mm) from the lot line; 3 feet (914 mm) from exterior walls and roofs; 10 feet (3048 mm) from openings into the building; and 10 feet (3048 mm) above adjoining grade.
- 27. Change Section 2404.7.7 to read:

2404.7.7 Fan motors and belts. Electric motors driving exhaust fans shall not be placed inside booths or ducts, unless approved. Fan rotating elements shall be nonferrous or nonsparking or the casing shall consist of, or be lined with, such material. Belts shall not enter the duct or booth unless the belt and pulley within the duct are tightly enclosed.

28. Change Section 2404.7.8 to read:

(N)2404.7.8 2404.7.8 Filters. Air intake filters that are part of a wall or ceiling assembly shall be maintained. Unless otherwise approved by the applicable building code, air intake filters that are part of a wall or ceiling assembly shall be listed as Class I or II in accordance

- with UL 900. Exhaust filters shall be provided where required by the applicable building code.
- 29. Change Section 2404.7.8.1 to read:

(N)2404.7.8.1 2404.7.8.1 Supports. Supports and holders for filters shall be maintained <u>as noncombustible</u> <u>materials unless otherwise approved by the applicable building code.</u>

30. Change Section 2404.7.8.3 to read:

(N)2404.7.8.3 2404.7.8.3 Maintaining air velocity. The required air velocity shall be maintained in accordance with the applicable building code Where provided, visible gauges, audible alarms, or pressure-activated devices shall be maintained to indicate or ensure that the required air velocity is maintained.

31. Change Section 2404.7.8.4 to read:

(N)2404.7.8.4 2404.7.8.4 Filter rolls. Filter rolls for spray booths shall be maintained in accordance with applicable building code. Unless otherwise permitted by the applicable building code, where spray booths are equipped with a filter roll that is automatically advanced, it shall be arranged to shut down the spraying operation if the filter roll fails to advance automatically.

32. Change Section 2404.7.8.7 to read:

(N)2404.7.8.7 2404.7.8.7 Waterwash spray booths. Waterwash spray booths shall be maintained in accordance with the applicable building code so as to prevent excessive accumulation of deposits in ducts and residue at duct outlets. Such booths shall be maintained so that air and overspray are drawn through a continuously flowing water curtain before entering an exhaust duct to the building exterior.

33. Change Section 2404.8 to read:

(N)2404.8 2404.8 Interlocks. Interlocks for spray application finishes shall be maintained <u>fully operational</u> in accordance with the applicable building code.

34. Delete Change Section 2404.8.1- to read:

2404.8.1 Automated spray application operations. Unless otherwise permitted by the applicable building code, where protecting automated spray application operations, automatic fire-extinguishing systems with an approved interlock feature shall maintain that feature so that, upon discharge of the system, it will automatically stop the spraying operations and workpiece conveyors into and out of the flammable vapor areas. Where the building is equipped with a fire alarm system, discharge of the automatic fire-extinguishing system shall be maintained to activate the building alarm notification appliances in accordance with the applicable building code.

#### 35. Change Section 2404.8.1.1 to read:

(N)2404.8.1.1 2404.8.1.1 Alarm station. Where required, a manual fire alarm and emergency system shutdown station shall be maintained accessible and fully operational in accordance with the applicable building code.

36. Delete Section 2404.8.1.2.

#### 37. Delete Change Section 2404.8.2- to read:

2404.8.2 Ventilation interlock prohibited. Unless otherwise permitted by the applicable building code, air makeup and flammable vapor area exhaust systems shall not be interlocked with the fire alarm system and shall remain in operation during a fire alarm condition.

Exception: Where the applicable building code requires such ventilation to be discontinued and dampers closed.

#### 38. Change Section 2404.9.3 to read:

(N)2404.9.3 2404.9.3 Ventilation. Positive mechanical ventilation providing a minimum of six complete air changes per hour shall be maintained in accordance with the applicable building code.

#### 39. Change Section 2404.9.4 to read:

(N)2404.9.4 2404.9.4 Electrical wiring. Electrical wiring within 10 feet (3048 mm) of the floor and 20 feet (6096 mm) horizontally of the limited spraying space shall be designed for Class I, Division 2 locations in accordance with the applicable building code.

D. The following changes shall be made to Section 2405, Dipping Operations:

#### 1. Delete Change Section 2405.2- to read:

2405.2 Location of dip-tank operations. Where required by the applicable building code, dip-tank operations conducted in buildings used for Group A, I, or R occupancies shall be located in a room designed for that purpose, equipped with an approved automatic sprinkler system, and separated vertically and horizontally from other areas in accordance with the applicable building code.

#### 2. Delete Change Section 2405.3- to read:

2405.3 Construction of dip tanks. Dip tanks shall be constructed in accordance with Sections 2405.3.1 through 2405.3.4.3 and NFPA 34. Dip tanks, including drain boards, shall be constructed of noncombustible material and their supports shall be of heavy metal, reinforced concrete, or masonry unless otherwise approved by the applicable building code.

#### 3. Change Section 2405.3.1 to read:

(N)2405.3.1 2405.3.1 Overflow. Overflow piping required for dip tanks shall be maintained in accordance with the applicable building code. To operate dip tanks greater than 150 gallons (568 L) in capacity or 10 square feet (0.93 m²) in liquid surface area, they shall be equipped with a trapped overflow pipe leading to an approved location outside the building in accordance with the building code.

#### 4. Change Section 2405.3.2 to read:

(N)2405.3.2 2405.3.2 Bottom drains. Bottom drains required for dip tanks shall be maintained in accordance with the applicable building code. Unless otherwise permitted by the applicable building code, dip tanks greater than 500 gallons (1893 L) in liquid capacity shall only be operated with bottom drains that are arranged to automatically and manually drain the tank quickly in the event of a fire unless the viscosity of the liquid at normal atmospheric temperature makes this impractical. Manual operation shall continue to be from a safe, accessible location. Where gravity flow is not practicable, automatic pumps shall be provided. Such drains shall be trapped and discharged to a closed, vented salvage tank or to an approved outside location in accordance with the applicable building code.

Exception: Dip tanks containing Class IIIB combustible liquids where the liquids are not heated above room temperature and the process area is protected by automatic sprinklers.

#### 5. Change Section 2405.4 to read:

(N)2405.4 2405.4 Fire protection. Dip tank operations shall be protected with a fire protection system in accordance with the applicable building code and maintained in accordance with Chapter 9.

#### 6. Change Section 2405.4.1 to read:

(N)2405.4.1 2405.4.1 Fixed fire-extinguishing equipment. Fixed fire extinguishing equipment required for dip tanks shall be maintained in accordance with the applicable building code. Where required by the applicable building code, an automatic fire-extinguishing system or dip-tank cover shall be maintained.

#### 7. Change Section 2405.4.1.1 to read:

(N)2405.4.1.1 2405.4.1.1 Fire-extinguishing system. Fire-extinguishing systems provided for dip tanks maintained in accordance with the applicable building code. Unless otherwise permitted by the applicable building code, an approved automatic fire-extinguishing system shall be provided for dip tanks with a 150 gallon (568 L) or more capacity or 10 square feet (0.93 m²) or larger liquid surface area.

8. Change Section 2405.7 to read:

(N)2405.7 2405.7 Ventilation of flammable vapor areas. Ventilation provided for flammable vapor areas shall be maintained in accordance with the applicable building code. Mechanical ventilation in flammable vapor areas shall be operated and maintained to prevent the dangerous accumulation of vapors. Where required by the applicable building code, the failure of any ventilating fan shall automatically stop the dipping conveyor system.

9. Delete Change Section 2405.9.1- to read:

2405.9.1 Location. Unless otherwise required by the applicable building code, tanks shall be located as far as practical from furnaces and shall not be located on or near combustible floors.

10. Change Section 2405.9.2 to read:

(N)2405.9.2 2405.9.2 Hoods. Hoods provided for tanks shall be maintained in accordance with the applicable building code. Unless otherwise required by the applicable building code, tanks shall be operated only with a noncombustible hood and vent or other approved venting means, terminating outside of the structure to serve as a vent in case of a fire. Such vent ducts shall be treated as flues and proper clearances shall be maintained from combustible materials.

11. Delete Change Section 2405.9.3. to read:

2405.9.3 Alarms. Tanks shall be operated with a high-temperature-limit switch maintained to sound an alarm when the temperature of the quenching medium reaches 50°F (10°C) below the flash point or other approved level as required by the applicable building code.

12. Change Section 2405.9.4 to read:

(N)2405.9.4 2405.9.4 Fire protection. Fire protection provided hardening and tempering tanks shall be maintained in accordance with the applicable building code. Unless otherwise permitted by the applicable building code, hardening and tempering tanks greater than 500 gallons (1893 L) in capacity or 25 square feet (2.3 m²) in liquid surface area shall be protected by an approved automatic fire-extinguishing system maintained in accordance with Chapter 9.

13. Delete Change Section 2405.10.1- to read:

2405.10.1 Paint supply. Unless otherwise permitted by the applicable building code, paint operations shall be supplied by a gravity tank not exceeding 10 gallons (38 L) in capacity or by direct low-pressure pumps arranged to shut down automatically in case of a fire by means of approved heat-actuated devices in accordance with the applicable building code.

14. Change Section 2405.11 to read:

(N)2405.11 2405.11 Roll-coating operations. Roll-coating operations shall be maintained in accordance with the applicable building code comply with Section 2405.10. In roll-coating operations utilizing flammable or combustible liquids, sparks from static electricity shall be prevented by electrically bonding and grounding all metallic rotating and other parts of machinery and equipment and by the installation of static collectors or by maintaining a conductive atmosphere such as a high relative humidity.

E. The following changes shall be made to Section 2406, Powder Coating:

1. Change Section 2406.2 to read:

(N)2406.2 2406.2 Location. Powder coating operations shall be conducted in enclosed powder coating rooms, enclosed powder coating facilities that are ventilated, or ventilated spray booths and in accordance with applicable building code.

2. Delete Change Section 2406.3- to read:

2406.3 Construction of powder coating rooms and booths. The design and construction of powder coating rooms shall be in accordance with the applicable building code. Spray booths shall be constructed in accordance with Section 2404.3.3.

Exception: Listed spray-booth assemblies that are constructed of other materials shall be allowed.

3. Change Section 2406.4 to read:

(N)2406.4 2406.4 Fire protection. Fire extinguishing systems provided for areas used for powder coating shall be maintained in accordance with the applicable building code. Where required by the applicable building code, automatic fire-extinguishing systems shall be maintained in accordance with Chapter 9.

- 4. Delete Section 2406.4.1.
- 5. Change Section 2406.6.4 to read:

(N)2406.6.4 2406.6.4 Grounding and bonding. Grounding and bonding provided for powder coating operations shall be maintained in accordance with the applicable building code. Precautions shall be taken to minimize the possibility of ignition by static electrical sparks through static bonding and grounding where possible of powder transport, application, and recovery equipment.

6. Change Section 2406.7 to read:

(N)2406.7 2406.7 Ventilation. Exhaust ventilation shall be maintained in accordance with the applicable building eode sufficient to maintain the atmosphere below one-

half the minimum explosive concentration for the material being applied. Nondeposited, air-suspended powders shall be removed through exhaust ducts to the powder recovery system.

- F. The following changes shall be made to Section 2407, Electrostatic Apparatus:
  - 1. Change Section 2407.2 to read:

(N)2407.2 2407.2 Location and clear space. A space of at least twice the sparking distance shall be maintained between goods being painted or deteared and electrodes, electrostatic atomizing heads, or conductors. A sign stating the sparking distance shall be conspicuously posted near the assembly. The location and clear space required for electrostatic apparatus and devices shall be maintained in accordance with the applicable building code and manufacturer's instructions.

Exception: Portable electrostatic paint-spraying apparatus listed for use in Class I, Division 1 locations.

2. Delete Change Section 2407.3- to read:

2407.3 Construction of equipment. Electrodes and electrostatic atomizing heads shall be maintained in accordance with the applicable building code. Portable electrostatic paint-spraying apparatus shall be listed for use in Class I, Division 1 locations.

3. Change Section 2407.3.1 to read:

(N)2407.3.1 2407.3.1 Barriers. Booths, fencing, railings, or guards shall be in accordance with the applicable building code maintained about the equipment so that either by their location or character, or both, isolation of the process is maintained from plant storage and personnel. Railings, fencing, and guards shall be of conductive material, adequately grounded, and at least 5 feet (1524 mm) from processing equipment in accordance with the applicable building code.

Exception: Portable electrostatic paint-spraying apparatus listed for use in Class I, Division 1 locations.

4. Change Section 2407.4 to read:

(N)2407.4 2407.4 Fire protection. Fire extinguishing systems provided for areas used for electrostatic spray finishing with fixed equipment shall be maintained in accordance with the applicable building code. Approved automatic fire-extinguishing systems shall be maintained in accordance with Chapter 9.

5. Change Section 2407.4.1 to read:

(N)2407.4.1 2407.4.1 Protection for automated liquid electrostatic spray application equipment. Flame detection apparatus required for automated liquid electrostatic spray application equipment shall be maintained in accordance with the applicable building

- eode. Where required by the applicable building code, automated liquid electrostatic spray application equipment shall maintain an approved, supervised flame detection apparatus that shall, in the event of ignition, react to the presence of flame and shall accomplish all of the following if required by the applicable building code:
- 1. Activation of a local alarm in the vicinity of the spraying operation and activation of the building alarm system if such a system is provided.
- 2. Shutting down of the coating material delivery system.
- 3. Termination of all spray application operations.
- 4. Stopping of conveyors into and out of the flammable vapor areas.
- 5. Disconnection of power to the high-voltage elements in the flammable vapor areas and disconnection of power to the system.
- 6. Change Section 2407.7 to read:

(N)2407.7 2407.7 Ventilation. Ventilation provided for flammable vapor areas shall be maintained in accordance with the applicable building code.

7. Change Section 2407.8 to read:

(N)2407.8 2407.8 Emergency shutdown. Emergency shutdown controls shall be maintained in accordance with the applicable building code. Where emergency shutdowns are required by the applicable building code, such devices shall be maintained with automatic controls operating without time delay to disconnect the power supply to the high-voltage transformer and signal the operator under any of the following conditions unless otherwise permitted by the applicable building code:

- 1. Stoppage of ventilating fans or failure of ventilating equipment from any cause.
- 2. Stoppage of the conveyor carrying articles past the high-voltage grid.
- 3. Occurrence of a ground or an imminent ground at any point of the high-voltage system.
- 4. Reduction of clearance below that required in Section <u>2407.2.</u>
- 8. Change Section 2407.9 to read:

(N)2407.9 2407.9 Ventilation interlock. Ventilation interlock required for electrostatic equipment shall be maintained in accordance with the applicable building code. Unless otherwise permitted by the applicable building code, hand electrostatic equipment shall be maintained as interlocked with the ventilation system for the spraying area so that the equipment cannot be operated unless the ventilating system is in operation.

G. The following change shall be made to Section 2408, Organic Peroxides and Dual-Component Coatings:

Delete Change Section 2408.2- to read:

2408.2 Use of organic peroxide coatings. Unless otherwise permitted by the applicable building code, spraying operations involving the use of organic peroxides and other dual-component coatings shall be conducted in approved, sprinklered spray booths complying with the applicable building code.

- H. The following changes shall be made to Section 2409, Indoor Manufacturing of Reinforced Plastics:
  - 1. Change Section 2409.3 to read:

(N)2409.3 2409.3 Fire protection. Automatic sprinkler systems provided for resin application areas shall be maintained in accordance with the applicable building code. Where required by the applicable building code, automatic fire-extinguishing systems shall be maintained in accordance with Chapter 9.

2. Change Section 2409.6 to read:

(N)2409.6 2409.6 Ventilation. Mechanical ventilation shall be maintained in accordance with the applicable building code throughout resin application areas in accordance with 2404.7 and the applicable building code. The ventilation rate shall be adequate to maintain the concentration of flammable vapors in the resin application area at or below 25% of the LFL unless otherwise permitted by the applicable building code.

Exception: Mechanical ventilation is not required for buildings that have 75% of the perimeter unenclosed.

3. Change Section 2409.6.1 to read:

(N)2409.6.1 2409.6.1 Local ventilation. Local ventilation shall be maintained in accordance with the applicable building code provided inside of work-pieces where personnel will be under or inside of the work-piece.

## 13VAC5-51-141. IFC Chapter 25 Fruit and Crop Ripening.

A. The following changes shall be made to Section 2501, General:

1. Change Section 2501.2 to read:

2501.2 Permits. Permits shall be required as set forth in Section 107.2.

2. Change Section 2501.3 to read:

2501.3 Ethylene generators. Approved ethylene generators shall be operated and maintained in accordance with <u>Section 2506 and</u> the applicable building code.

B. The following change shall be made to Section 2503, Ethylene Gas:

Change Section 2503.2 to read:

(N)2503.2 2503.2 Dispensing. Valves controlling discharge of ethylene shall be maintained to limit the concentration of gas in accordance with this chapter and the applicable building code.

- C. The following changes shall be made to Section 2504, Sources of Ignition:
  - 1. Change Section 2504.1 to read:

(N)2504.1 2504.1 Ignition prevention. Sources of ignition shall be controlled or protected in accordance with the applicable building code this section and Chapter 3.

2. Change Section 2504.2 to read:

(N)2504.2 2504.2 Electrical wiring and equipment. Electrical wiring and equipment, including luminaires, shall be <u>classified and</u> maintained in accordance with <u>Chapter 6</u>, the applicable building code, and the maintenance provisions of NFPA 70.

3. Change Section 2504.3 to read:

(N)2504.3 2504.3 Static electricity. Bonding and grounding provided for <u>permanent</u> containers, piping, and equipment shall be maintained in accordance with the applicable building code. <u>Portable containers, piping, and equipment shall be bonded and grounded in accordance with Chapter 57.</u>

4. Change Section 2504.5 to read:

(N)2504.5 2504.5 Heating. Heating shall be maintained in accordance with <u>Chapter 6 and</u> the applicable building code.

- D. The following changes shall be made to Section 2506, Ethylene Generators:
  - 1. Change Section 2506.1 to read:

(N)2506.1 2506.1 Ethylene generators. Ethylene generators shall be listed and labeled by an approved testing laboratory, approved, and used only in approved rooms in accordance with the ethylene generator manufacturer's instructions. The listing evaluation shall include documentation that the concentration of ethylene gas does not exceed 25% of the lower explosive limit (LEL).

2. Change Section 2506.2 to read:

(N)2506.2 2506.2 Ethylene generator rooms. Ethylene generator rooms shall be maintained in accordance with the applicable building code. Portable ethylene generators shall be used in rooms having a volume of not

less than 1,000 cubic feet (28 m³). Rooms shall have air circulation to ensure even distribution of ethylene gas and shall be free from sparks, open flames, or other ignition sources.

## 13VAC5-51-142. IFC Chapter 27 Semiconductor Fabrication Facilities.

- A. Change Section 2701.1 to read:
- 2701.1 Scope. Semiconductor fabrication facilities and comparable research and development areas classified as Group H-5 shall comply with this chapter to the extent that the provisions of this chapter relate to operation and maintenance and not to the construction of Group H-5 buildings or structures.
- B. Delete Section 2701.4.
- C. Change Section 2701.5 to read:
- 2701.5 Permits. Permits shall be required as set forth in Section 107.2.
- D. Change Section 2703.1.3 to read:
- (N)2703.1.3 2703.1.3 Signals. Emergency equipment and alarm and detection systems providing signals to emergency control stations shall be maintained in accordance with the applicable building code.
- E. Change Section 2703.2.2 to read:
- 2703.2.2 General requirements. In addition to the requirements in Section 2703.2, systems, equipment and processes shall also comply with Section 5003.2, other applicable provisions of this code.
- F. Delete Sections 2703.3 and 2703.3.1.
- G. Change Section Sections 2703.3.2 through 2703.3.8 to read:
  - (N)2703.3.2 2703.3.2 Pass-throughs in exit access corridors. Pass-throughs in exit access corridors shall be in accordance with the applicable building code.
  - (N)2703.3.3 2703.3.3 Liquid storage rooms. Liquid storage rooms shall be maintained in accordance with the applicable building code.
  - (N)2703.3.4 2703.3.4 HPM rooms. Hazardous production materials (HPM) rooms shall be maintained in accordance with the applicable building code.
  - (N)2703.3.5 2703.3.5 Gas cabinets. Gas cabinets shall be maintained in accordance with the applicable building code.
  - (N)2703.3.6 2703.3.6 Exhausted enclosures. Exhausted enclosures shall be maintained in accordance with the applicable building code.

- (N)2703.3.7 2703.3.7 Gas rooms. Gas rooms shall be maintained in accordance with the applicable building code.
- (N)2703.3.8 2703.3.8 Service corridors. Service corridors shall be maintained in accordance with the applicable building code.
- H. Change Sections 2703.7 and 2703.7.1 to read:
- (N)2703.7 2703.7 Electrical wiring and equipment. Electrical wiring and equipment in HPM facilities shall be maintained in accordance with the applicable building code.
- (N)2703.7.1 2703.7.1 Fabrication areas. Electrical wiring and equipment in fabrication areas shall be maintained in accordance with the applicable building code.
- I. Delete Section 2703.7.2.
- J. Change Section 2703.7.3 to read:
- (N)2703.7.3 2703.7.3 HPM rooms, gas rooms, and liquid storage rooms. Electrical wiring and equipment in HPM rooms, gas rooms, and liquid storage rooms shall be maintained in accordance with the applicable building code.
- K. Change Section 2703.7.10 to read:
- (N)2703.10 2703.10 Automatic sprinkler system. Automatic sprinkler systems shall be maintained in accordance with the applicable building code.
- L. Delete Sections 2703.10.1 and 2703.10.1.1.
- M. Delete Sections 2703.10.2 through 2703.10.4.4.1.
- N. Change Sections 2703.10.4.4.2 and 2703.10.4.4.3 to read:
- (N)2703.10.4.4.2 2703.10.4.4.2 Control valve. Control valves provided for sprinklers installed in exhaust ducts shall be maintained in accordance with the applicable building code.
- (N)2703.10.4.4.3 2703.10.4.4.3 Drainage. Drainage provided to remove sprinkler water discharged in exhaust ducts shall be maintained.
- O. Delete Section 2703.10.4.4.4.
- P. Change Sections 2703.10.5 through 2703.12 to read:
- (N)2703.10.5 2703.10.5 Sprinkler alarms and supervision. Automatic sprinkler systems shall be maintained in accordance with applicable building code.
- (N)2703.11 2703.11 Manual fire alarm system. Manual fire alarm systems shall be maintained in accordance with the applicable building code.
- (N)2703.12 2703.12 Emergency alarm system. Emergency alarm systems shall be maintained in accordance with the applicable building code.

- Q. Delete Sections 2703.12.1 and 2703.12.1.1.
- R. Change Sections 2703.12.1.2 and 2703.12.1.3 to read:

(N)2703.12.1.2 2703.12.1.2 Corridors and interior exit stairways and ramps. Emergency alarms for corridors, interior exit stairways and ramps, and exit passageways shall be maintained in accordance with the applicable building code.

(N)2703.12.1.3 2703.12.1.3 Liquid storage rooms, HPM rooms, and gas rooms. Emergency alarms for liquid storage rooms, HPM rooms, and gas rooms shall be maintained in accordance with the applicable building code.

- S. Delete Sections 2703.12.2 and 2703.12.3.
- T. Change Section 2703.13 to read:

(N)2703.13 Continuous gas 2703.13 Gas detection systems. Continuous gas Gas detection systems shall be maintained in accordance with the applicable building code.

- U. Delete Sections 2703.13.1 through 2703.13.2.2.
- V. Change Section 2703.14 to read:

(N)2703.14 2703.14 Exhaust ventilation systems for HPM. Exhaust ventilation systems and materials for exhaust ducts utilized for the exhaust of HPM shall be maintained in accordance with the applicable building code.

- W. Delete Sections 2703.14.1 and 2703.14.2.
- X. Change Section 2703.15 to read:

(N)2703.15 2703.15 Emergency power system. Emergency power system systems shall be maintained in accordance with the applicable building code.

- Y. Delete Section 2703.15.1.
- Z. Change Sections 2703.15.2 through 2704.1 to read:

(N)2703.15.2 2703.15.2 Exhaust ventilation systems. Exhaust ventilation systems shall be maintained in accordance with the applicable building code.

(N)2703.16 2703.16 Subatmospheric pressure gas systems. Subatmospheric pressure gas systems (SAGS) shall be maintained in accordance with the applicable building code.

(N)2704.1 2704.1 General. Storage of hazardous materials shall comply with Section 2703 and this section and other applicable provisions of this code to the extent that such requirements are operational in nature and do not affect how a building is constructed.

AA. Change Section 2704.2.2.1 to read:

2704.2.2.1 Storage and use in fabrication areas. The maximum quantities of hazardous materials stored or used

in a single fabrication area shall not exceed the quantities set forth by the applicable building code.

- BB. Delete Table 2704.2.2.1.
- CC. Change Section 2704.3.1 to read:

2704.3.1 HPM storage. The indoor storage of HPM in quantities greater than those listed in Sections 5003.1.1 and 3404.3.4 shall be in a room complying with the requirements of this code for a liquid storage room, HPM room, or gas room as appropriate for the materials stored.

DD. Change Section 2705.1 to read:

2705.1 General. The use and handling of hazardous materials shall comply with this section, Section 2703, and other applicable provisions of this code to the extent that such requirements are operational in nature and do not affect how a building is constructed.

EE. Change Section 2705.2.3.2 to read:

(N)2705.2.3.2 2705.2.3.2 Protection of vessels. Vessels containing hazardous materials located in or connected to a workstation shall be protected as follows:

- 1. HPM: Vessels containing HPM shall be protected from physical damage and shall not project from the workstation.
- 2. Compressed gases: Protection for compressed gas vessels shall also comply with Section 5303.5.
- 3. Cryogenic fluids: Protection for cryogenic fluid vessels shall also comply with Section 5503.5.
- FF. Change Section 2705.3.1 to read:

(N)2705.3.1 2705.3.1 Corridors and enclosures for stairways and ramps. Corridors and enclosures for exit stairways and ramps in new fabrication areas shall not contain HPM, except as permitted in corridors by Section 2705.3.2 and the applicable building code.

GG. Change Section 2705.3.2.1 to read:

2705.3.2.1 Fabrication area alterations. Where existing fabrication areas are altered or modified in existing buildings, HPM is allowed to be transported in existing corridors where such corridors comply with the applicable building code.

HH. Delete Section 2705.3.3.

13VAC5-51-142.5. IFC Chapter 28 Lumber Yards and Agro-Industrial, Solid Biomass, and Woodworking Facilities.

A. Change Section 2801.2 to read:

2801.2 Permit. Permits shall be required as set forth in Section 107.2.

#### B. Change Sections 2803.1 through 2803.3 to read:

(N)2803.1 2803.1 Open yards. Open yards around structures required by the applicable building code shall be maintained. The space shall be maintained free of obstructions associated with the outdoor storage of the materials regulated by Chapter 28, which could interfere with the function of the open space, especially that of providing fire department access to the building.

(N)2803.2 2803.2 Dust control. Equipment or machinery located inside buildings that generates or emits combustible dust equipped with an approved dust collection and exhaust system shall be maintained in accordance with the applicable building code. Equipment or systems that are used to collect, process or convey combustible dusts shall be provided with an approved explosion control system shall be maintained in accordance with Chapter 22 and the applicable building code. Equipment or systems that are used to collect, process, or convey combustible dusts provided with an approved explosion control system in accordance with the applicable building code shall be maintained in accordance with Chapter 9.

(N)2803.2.1 2803.2.1 Explosion venting. Explosion venting required for dust explosion hazards shall be maintained in accordance with the applicable building code Where a dust explosion hazard exists in equipment rooms, buildings, or other enclosures, such areas shall be declared an unsafe condition in accordance with Section 110.1 and operations shall not be continued until the hazard is mitigated. Where explosion venting is provided it shall be maintained in accordance with Chapter 9 and the applicable building code.

(N)2803.3 2803.3 Waste removal. Waste removal systems required for sawmills, planning mills and other woodworking plants shall be maintained in accordance with the applicable building code Sawmills, planing mills, and other woodworking plants shall maintain waste removal systems that collect and remove sawdust and shavings. Such systems shall be maintained in accordance with Chapter 22 and comply with the applicable building code.

Exception: Manual waste removal where when approved.

#### C. Change Section 2803.4 to read:

(N)2803.4 2803.4 Electrical equipment. Electrical wiring and equipment shall be maintained in accordance with Chapter 6, the applicable building code, and the maintenance provisions of NFPA 70.

D. Change Sections Section 2804.2, and delete Section 2804.2.1.

#### Section 2804.2 to read:

(N)2804.2 2804.2 Fire alarms. Where provided, fire alarms alarm systems shall be maintained in accordance with the applicable building code Chapter 9.

(N)2804.2.1 Manual fire alarms. Where installed, manual fire alarm systems shall be maintained in accordance with the applicable building code.

#### E. Change Section 2804.4 to read:

(N)2804.4 2804.4 Automatic sprinkler systems. Automatic sprinkler systems shall be maintained in accordance with the applicable building code Chapter 9.

#### F. Change Section 2805.2 to read:

(N)2805.2 2805.2 Dryer protection. Dryers shall be maintained in accordance with the applicable building code. Dryers protected by an approved, automatic deluge water-spray suppression system shall be maintained in accordance with Chapter 9. Deluge heads shall be inspected quarterly for pitch buildup. Deluge heads in dryers shall be flushed during regular maintenance for functional operation.

#### G. Change Section 2807.2 to read:

2807.2 Size of piles. Piles shall not exceed 60 feet (18 288 (18,288 mm) in height, 300 feet (91 440 (91,440 mm) in width, and 500 feet (152 m) in length. Piles shall be separated from adjacent piles or other exposures by approved fire apparatus access roads.

Exception: The fire code official is authorized to allow the pile size to be increased where additional approved fire protection is provided in accordance with Chapter 9.

#### H. Change Section 2807.3 to read:

(N)2807.3 Pile 2807.3 Outdoor pile fire protection. Automatic sprinkler protection provided in conveyor tunnels and combustible enclosures that pass under a pile shall be maintained in accordance with the applicable building code. Where conveyor tunnels and combustible enclosures that pass under an outdoor pile, automatic sprinkler protection shall be provided. Automatic sprinkler protection shall be maintained in accordance with Chapter 9.

#### I. Change Section 2808.7 to read:

(N)2808.7 2808.7 Pile fire protection. Automatic sprinkler protection shall be provided in conveyor tunnels and combustible enclosures that pass under a pile shall be maintained in accordance with the applicable building eode. Combustible conveyor systems and enclosed conveyor systems shall be equipped with an approved automatic sprinkler system. These systems shall be maintained in accordance with Chapter 9.

Note: Systems regulated by the USBC must comply with the applicable building code.

## 13VAC5-51-143.5. IFC Chapter 29 Manufacture of Organic Coatings.

A. Change Section 2901.2 to read:

2901.2 Permits. Permits shall be required as set forth in Section 107.2.

B. Delete Change Section 2903.1. to read:

2903.1 Building features. Unless approved by the applicable building code, manufacturing of organic coatings shall be done only in buildings that do not have pits or basements.

C. Delete Change Section 2903.2. to read:

2903.2 Location. Unless approved by the applicable building code, organic coating manufacturing operations and operations incidental to or connected with organic coating manufacturing shall not be located in buildings having other occupancies.

D. Change Section 2903.4 to read:

2903.4 Fire protection systems. Fire protection systems shall be maintained, periodically inspected, and tested in accordance with Chapter 9.

E. Change Section 2903.10 to read:

2903.10 Drainage. Drainage facilities shall be maintained to direct flammable and combustible liquid leakage and fire protection water to an approved location away from the building, any other structure, any storage area, or adjoining premises.

F. Change Section 2903.11 to read:

(N)2903.11 2903.11 Alarm system. Alarm systems shall be maintained in accordance with the applicable building code Chapter 9.

G. Change Section 2904.1 to read:

(N)2904.1 2904.1 Wiring and equipment. Electrical wiring and equipment shall be maintained in accordance with Chapter 6, the applicable building code, and the maintenance provisions of NFPA 70.

H. Change Section 2904.3 to read:

(N)2904.3 2904.3 Bonding. Bonding provided for equipment including tanks, machinery and piping shall be maintained in accordance with the applicable building code. Equipment, including tanks, machinery, and piping, shall not be operated where an ignitable mixture is capable of being present unless bonded and connected to a ground in accordance with the applicable building code.

I. Change Section 2904.3.1 to read:

(N)2904.3.1 2904.3.1 Piping. Electrically isolated sections of metallic piping or equipment shall be maintained grounded or bonded to the other grounded portions of the system in accordance with the applicable building code.

J. Change Section 2904.4 to read:

(N)2904.4 2904.4 Ground. Metal framing of buildings shall be grounded in accordance with the applicable building code.

K. Delete Change Section 2905.1- to read:

2905.1 Process location. Process operations shall be conducted in structures approved in accordance with the applicable building code.

L. Change Section 2905.4 to read:

(N)2905.4 2905.4 Explosion control. Explosion control shall be maintained in accordance with the applicable building code and maintenance provisions of areas subject to potential deflagration hazards as indicated by the applicable building code. Explosion control shall be maintained in accordance with Section 911 and NFPA 35.

M. Change Section 2905.5 to read:

(N)2905.5 2905.5 Ventilation. Enclosed structures in which Class I liquids are processed or handled shall be ventilated to a safe location outside of the structure in accordance with the applicable building code.

N. Change Section 2906.1 to read:

(N)2906.1 2906.1 Mills. Mills operating with close clearances that process flammable and heat-sensitive materials, such as nitrocellulose, shall be maintained in accordance with the applicable building code maintain operations in a detached building or in a noncombustible structure without other occupancies unless otherwise approved by the applicable building code. The amount of nitrocellulose or other flammable material brought into the area shall not be more than the amount required for a batch.

O. Change Section 2909.2 to read:

(N)2909.2 2909.2 Tank storage. Tank storage for flammable and combustible liquids located inside of structures shall be limited to storage areas at or above grade that are separated from the processing area in accordance with the applicable building code. Processing equipment containing flammable and combustible liquids and storage in quantities essential to the continuity of the operations shall not be prohibited in the processing area.

P. Change Section 2909.4 to read:

 $\frac{\text{(N)2909.4}}{\text{2909.4}}$  Nitrocellulose storage. Nitrocellulose storage shall be located on a detached pad or in a separate

structure or a room enclosed in accordance with the applicable building code. When nitrocellulose storage is present, the area shall not be utilized for any other use in accordance with the applicable building code. Electrical wiring and equipment in storage areas adjacent to process areas shall be maintained in accordance with Section 2904.2.

#### Q. Change Section 2909.6 to read:

2909.6 Finished products. Finished products that are flammable or combustible liquids shall be stored outside of structures, in a separate structure, or in a room separated from the processing area where such storage is permitted under the applicable building code. The storage of finished products shall be in tanks or closed containers in accordance with Chapter 57.

#### 13VAC5-51-144. IFC Chapter 30 Industrial Ovens.

#### A. Change Section 3001.1 to read:

(N)3001.1 3001.1 Scope. This chapter shall apply to the maintenance and operation of industrial ovens and furnaces. Industrial ovens and furnaces shall comply with the applicable <u>maintenance</u> provisions of NFPA 86, the <u>applicable building code</u>, and this chapter. The terms "ovens" and "furnaces" are used interchangeably in this chapter.

#### B. Change Section 3001.2 to read:

3001.2 Permits. Permits shall be required as set forth in Section 107.2.

#### C. Change Section 3003.1 to read:

(N)3003.1 3003.1 Ventilation. Enclosed rooms or basements containing Ventilation or combustion air for industrial ovens or furnaces shall be maintained in accordance with the applicable building code.

#### D. Delete Change Section 3003.4. to read:

3003.4 Temperatures. Unless otherwise approved by the applicable building code, roofs and floors of ovens shall maintain insulation and ventilation to prevent temperatures at combustible ceilings and floors from exceeding 160°F (71°C).

#### E. Change Section 3004.1- to read:

(N)3004.1 3004.1 Fuel-gas piping. Fuel-gas piping serving industrial ovens shall be maintained in accordance with this section and remain in accordance with the applicable building code.

#### F. Delete Change Section 3004.2- to read:

3004.2 Shutoff valves. Manual fuel shutoff valves for industrial ovens or furnaces shall be maintained in accordance with the applicable building code.

#### G. Change Section 3004.2.1 to read:

(N)3004.2.1 3004.2.1 Fuel supply lines. Valves for fuel supply lines shall be maintained in accordance with the applicable building code located within 6 feet (1829 mm) of the appliance served.

Exception: When a valve located in the same general area as the appliance served has been approved in accordance with the applicable building code.

#### H. Delete Change Section 3004.3- to read:

3004.3 Valve position. Manual fuel shutoff valves shall be maintained to visually indicate the open or closed position of the valve. Manual fuel shutoff valves shall not be equipped with removable handles or wrenches unless the handle or wrench can only be installed parallel with the fuel line when the valve is in the open position.

#### I. Change Sections 3005.1, 3006.1, and 3006.2 to read:

(N)3005.1 3005.1 Shut down. Interlocks shall be maintained in accordance with the applicable building code for Class A ovens so that conveyors or sources of flammable or combustible materials shall shut down if either the exhaust or recirculation air supply fails.

(N)3006.1 3006.1 Required protection. Fire-extinguishing systems provided for Classes A and B ovens that contain, or are utilized for the processing of, combustible materials shall be maintained in accordance with the applicable building code Chapter 9.

(N)3006.2 3006.2 Fixed fire-extinguishing systems. Fixed fire-extinguishing systems shall be maintained in accordance with the applicable building code. Chapter 9 for Class C or D ovens to protect against such hazards as overheating, spillage of molten salts or metals, quench tanks, ignition of hydraulic oil, and escape of fuel.

# 13VAC5-51-144.2. IFC Chapter 31 Tents, <u>Temporary Special Event Structures</u>, and Other Membrane Structures.

A. The following change shall be made to Section 3101, General:

Change Section 3101.1 to read:

3101.1 Scope. Tents, temporary stage canopies special event structures, and membrane structures shall comply with this chapter. The provisions of Section 3103 are applicable only to temporary tents and membrane structures. The provisions of Section 3104 are applicable to temporary and permanent tents and membrane structures. Other temporary structures shall comply with the applicable building code The provisions of Section 3104 are applicable to temporary and permanent tents and membrane structures.

- B. The following changes shall be made to Section 3103, Temporary Tents and Membrane Structures:
  - 1. Change Section 3103.1 to read:

(N)3103.1 3103.1 General. Tents and membrane structures used for temporary periods All temporary tents and membrane structures shall comply with this section. Other temporary structures erected for a period of 180 days or less shall comply with the applicable building code.

2. Change Section 3103.2 to read:

(N)3103.2 3103.2 Approval required. Tents and membrane structures having an area in excess of 900 square feet (84 m²) shall not be erected, operated or maintained for any purpose without first obtaining a permit and approval from the fire code official in accordance with Table 107.2.

3. Change Add Section 3103.2.1 and delete Section 3103.3.1.

Section 3103.2.1 to read:

3103.2.1 Multiple tents. The aggregate area of multiple tents separated by less than 12 feet (3658 mm) shall not exceed 900 square feet unless approved in accordance with Section 3103.2.

- 4. Change Section 3103.4 to read:
  - 3103.4 Permits. Permits shall be required as set forth in Section 107.2.
- 5. Change Section Sections 3103.9.1 through 3103.9.3 to read:
  - 3103.9.1 Tents and membrane structures exceeding one story. Tents and membrane structures exceeding one story shall be designed and constructed to comply with applicable building code.
  - 3103.9.2 Tents and membrane structures greater than 7,500 square feet. Tents and membrane structures greater than 7,500 square feet shall be designed and constructed to comply with the applicable building code.
  - 3103.9.3 Tents and membrane structures with an occupant load greater than 1,000. Tents and membrane structures with an occupant load greater than 1,000 shall be designed and constructed to comply with applicable building code.
- C. The following changes shall be made to Section 3104, Temporary and Permanent Tents and Membrane:
  - 1. Change Section 3104.1 to read:
    - 3104.1 General. Tents and membrane structures, both temporary and permanent, shall be in accordance with

this section. Permanent tents and membrane structures shall also comply with the applicable building code.

2. Change Section 3104.2 to read:

3104.2 Flame propagation performance treatment. Before a permit is granted, the owner or agent shall file a certificate executed by an approved testing laboratory certifying that the tents and membrane structures and their appurtenances; sidewalls, drops, and tarpaulins; floor coverings, bunting, and combustible decorative materials and effects, including sawdust where used on floors or passageways, are composed of material meeting the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 or shall be treated with a flame retardant in an approved manner and meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701, and that such flame propagation performance criteria are effective for the period specified by the permit.

- 3. Change Section 3104.4 to read:
  - 3104.4 Certification. An affidavit or affirmation shall be submitted to the fire code official and a copy retained on the premises on which the tent or air-supported structure is located. The affidavit shall attest to all of the following information relative to the flame propagation performance criteria of the fabric:
- 1. Names and address of the owners of the tent or air-supported structure.
- 2. Date the fabric was last treated with flame-retardant solution.
- 3. Trade name or kind of chemical used in treatment.
- 4. Name of person or firm treating the material.
- 5. Name of testing agency and test standard by which the fabric was tested.
- 4. Change Section 3104.13 to read:

3104.13 Fire protection equipment. Fire hose lines, water supplies, and other auxiliary fire equipment shall be maintained at the site in such numbers and sizes as approved.

5. Change Section 3104.14 to read:

3104.14 Occupant load factors. The occupant load allowed in an assembly structure, or portion thereof, shall be determined in accordance with Chapter 10 or applicable building code.

6. Change Section 3104.15.1 to read:

3104.15.1 Installation. Heating or cooking equipment tanks, piping, hoses, fittings, valves, tubing, and other

related components shall be installed as specified by the applicable building code and shall be approved.

#### 7. Change Section 3104.15.2 to read:

3104.15.2 Venting. Gas, liquid and solid fuel burning equipment designed to be vented shall be vented to the outside air as specified by the applicable building code and shall be approved. Such vents shall be equipped with approved spark arresters where required. Where vents or flues are used, all portions of the tent or membrane structure shall be not less than 12 inches (305 mm) from the flue or vent.

#### 8. <u>4.</u> Change Section 3104.16.1 to read:

3104.16.1 General. LP-gas equipment such as tanks, piping, hoses, fittings, valves, tubing and other related components shall be approved and in accordance with Chapter 61 and with the applicable building code.

- D. The following changes shall be made to Section 3105, Temporary State Canopies Special Event Structures:
  - 1. Change Section 3105.1 to read:

(N)3105.1 3105.1 General. Operation and maintenance of temporary stage canopies special event structures shall be in accordance with Section 3104, Sections 3105.2 through 3105.8 3105.9, and ANSI E1.21.

2. Change Section Sections 3105.2 and 3105.3 to read:

(N)3105.2 3105.2 Approval. Temporary stage canopies special event structures in excess of 400 square feet (37 m<sup>2</sup>) shall not be erected for any purpose without first obtaining approval and a permit from the building official.

3105.3 Permits. Permits shall be required as set forth in Section 107.2.

3. Change Section 3105.5 to read:

(N)3105.5 3105.5 Required documents. Documents shall be submitted to the building official where required by the USBC. Where an operational permit is required, the following documents shall be submitted to the fire official for approval:

- 1. Designation of responsible party: The owner of the temporary special event structure shall designate in writing a person to have responsibility for the temporary special event structure on the site. The designated person shall have sufficient knowledge of the construction documents, manufacturer's recommendations, and operations plan to make judgments regarding the structure's safety and to coordinate with the fire code official.
- 2. Operations plan: The operations plan shall reflect manufacturer's operational guidelines, procedures for

environmental monitoring and actions to be taken under specified conditions consistent with the construction documents.

Note: Construction documents shall be submitted to the building official where required by the USBC.

4. Change Section 3105.6.2 to read:

(N)3105.6.2 3105.6.2 Inspection report. The inspecting agency or individual shall furnish an inspection report to the building official and fire code official. The inspection report shall indicate that the temporary stage canopy was inspected and was or was not installed in accordance with the approved construction documents. Discrepancies shall be brought to the immediate attention of the installer for correction. Where any discrepancy is not corrected, it shall be brought to the attention of the building official and fire code official and the designated responsible party.

5. Change Section 3105.7 to read:

(N)3105.7 3105.7 Means of egress. The means of egress for temporary stage canopies shall comply with Chapter 10 and the applicable building code.

- 6. Delete Section 3105.8.
- 7. Change Section 3106.2.2 to read:

3106.2.2 Permits. An operational permit shall be required as set forth in Section 107.2.

8. Change Section 3107.10 to read:

3107.10 Fire protection equipment. Fire hose lines, water supplies, and other auxiliary fire equipment shall be maintained at the site in such numbers and sizes as required by the fire code official.

9. Change Section 3107.11 to read:

3107.11 Occupant load factors. The occupant load allowed in an assembly structure, or portion thereof, erected for a period of 180 days or less shall be determined in accordance with Chapter 10 of the IFC.

10. Change Section 3107.12.1 to read:

3107.12.1 Installation. Heating or cooking equipment tanks, piping, hoses, fittings, valves, tubing, and other related components in assembly structures, or portions thereof, erected for 180 days or fewer shall be operated and maintained in accordance with manufacturer specifications and other provisions of this code.

11. Change Section 3107.12.2 to read:

3107.12.2 Venting. Gas, liquid, and solid fuel-burning equipment designed to be vented shall be vented to the outside air as specified by the applicable building code and shall be approved. Such vents shall be equipped with

approved spark arresters where required. Where vents or flues are used, all portions of the tent or membrane structure shall be not less than 12 inches (305 mm) from the flue or vent.

## 13VAC5-51-144.4. IFC Chapter 32 High-Piled Combustible Storage.

- A. The following changes shall be made to Section 3201, General:
  - 1. Change Section 3201.1 to read:
    - (N)3201.1 3201.1 Scope. Maintenance and operational aspects of high-piled combustible storage shall be in accordance with this chapter. In addition to the requirements of this chapter, the following material-specific requirements shall apply:
    - 1. Aerosols shall be in accordance with Chapter 51.
  - 2. Flammable and combustible liquids shall be in accordance with Chapter 57.
  - 3. Hazardous materials shall be in accordance with Chapter 50.
  - 4. Storage of combustible paper records shall be in accordance with the applicable NFPA 13 standard.
  - 5. Storage of combustible fibers shall be in accordance with Chapter 37.
  - 6. General storage of combustible material shall be in accordance with Chapter 3.
  - 2. Change Section 3201.2 to read:
    - 3201.2 Permits. A permit shall be required as set forth in Section 107.2.
  - 3. Change Section 3201.3 and delete Sections 3201.3.1 and 3201.3.2.

#### Section 3201.3 to read:

- (N)3201.3 Construction documents. 3201.3 High-piled storage operational plan. Prior to the use and operation of high-piled storage in new structures or buildings requesting a change of occupancy or use, plans and specifications shall be submitted to the building official for review and approval. Following approval of the plans, a copy of the approved plans shall be maintained on the premises in an approved location. The onsite plans shall include the following applicable items:
- 1. Floor plan of the building showing locations and dimensions of high-piled storage areas.
- 2. Usable storage height for each storage area.
- 3. Number of tiers within each rack if applicable.
- 4. Commodity clearance between top of storage and the sprinkler deflector for each storage arrangement.

- 5. Aisle dimensions between each storage array.
- 6. Maximum pile volume for each storage array.
- 7. Location and classification of commodities in accordance with Section 3203 or the applicable building code.
- 8. Location of commodities that are banded or encapsulated.
- 9. Location of required fire department access doors.
- 10. Type of fire suppression and fire detection systems.
- 11. Location of valves controlling the water supply of ceiling and in-rack sprinklers.
- 12. Type, location, and specifications of smoke removal and curtain board systems.
- <u>13. Dimension and location of transverse and longitudinal flue spaces.</u>
- 14. Additional information regarding required design features, commodities, storage arrangement, and fire protection features within the high-piled storage area when required by the fire code official.
- B. The following changes shall be made to Section 3204, Designation of High-Piled Storage Areas:
  - 1. Change Section 3204.1 to read:
    - (N)3204.1 3204.1 General. The operational operation and maintenance of high-piled storage areas, and portions of high-piled storage areas intended for storage, shall be maintained in accordance with the approved plan specified in Section 3201.3 and the applicable building code.
  - 2. Delete Section 3204.2.
- C. The following changes shall be made to Section 3206, General Fire Protection and Life Safety Features:
  - 1. Change Section 3206.1 to read:
    - (N)3206.1 3206.1 General. Fire protection and life safety features for high-piled storage areas shall be maintained in accordance with the applicable building code Sections 3206.3 through 3206.10.
  - 2. Delete Sections 3206.2 and 3206.2.1 and Table 3206.2.
  - 3. Delete Change Section 3206.3. 3206.3 to read:
  - 3206.3 Separation of high-piled storage areas. High-piled storage areas shall be maintained as separated from other portions of the building where required by the storage plan in Section 3201.3 and the applicable building code.

4. Delete Change Section 3206.3.1- to read:

3206.3.1 Separation from other uses. Mixed occupancies shall be maintained as separated in accordance with the storage plan in Section 3201.3 and the applicable building code.

5. Delete Change Section 3206.3.2- to read:

3206.3.2 Multiple high-piled storage areas. Multiple high-piled storage areas shall be maintained in accordance with the storage plan in Section 3201.3 and the applicable building code.

6. Delete Section 3206.3.2.1.

7. Delete Section 3206.3.2.2.

8. 7. Change Section 3206.4 to read:

(N)3206.4 3206.4 Automatic sprinklers. Automatic sprinkler systems shall be maintained in accordance with Chapter 9 and remain in accordance with the applicable building code.

(N)3206.4.1 3206.4.1 Pallets. The requirements based on the presence of pallets shall be maintained in accordance with the storage plan in Section 3201.3 and the applicable building code.

9. 8. Change Section 3206.4.1.1 to read:

(N)3206.4.1.1 3206.4.1.1 Plastic pallets. Plastic pallets listed and labeled in accordance with UL 2335 or FM 4996 shall be treated as wood pallets.

10. 9. Change Section 3206.5 to read:

(N)3206.5 3206.5 Fire detection. Fire detection provided for high-piled storage areas shall be maintained in accordance with Chapter 9 and remain in accordance with the approved storage plan in section 3201.3, and the applicable building code.

11. 10. Change Section 3206.6 to read:

(N)3206.6 3206.6 Building access. Where building access is required, it shall be maintained in accordance with the applicable building code by the applicable building code, fire apparatus access roads shall remain and be maintained in accordance with Section 503.

12. 11. Change Section 3206.6.1 3206.7 to read:

(N)3206.6.1 3206.7 Access doors. Access doors shall be maintained in accordance with accessible, available at all times, and remain in accordance with the approved storage plan in Section 3201.3 and the applicable building code.

12. Delete Sections 3206.7.1 through 3206.7.3.

13. Change Section 3206.6.1.1 3206.7.5 to read:

(N)3206.6.1.1 3206.7.5 Number of doors required. The minimum number of doors shall be maintained in accordance with the approved storage plan in Section 3201.3 and remain in accordance with the applicable building code.

14. Change Section 3206.6.1.2 3206.7.6 to read:

(N)3206.6.1.2 3206.7.6 Door size and type. Access doors shall be maintained in accordance with the approved storage plan in Section 3201.3 and remain in accordance with the applicable building code. Roll-up doors shall not be used unless approved.

15. Delete Section 3206.1.3 Sections 3206.7.7 and 3206.7.8.

16. Change Section 3206.7 3206.8 to read:

(N)3206.7 3206.8 Smoke and heat removal. Where smoke and heat removal is systems including draft curtains are required, it they shall be maintained in accordance with Chapter 9 and the approved storage plan in Section 3201.3 and remain in accordance with the applicable building code.

17. Change Section 3206.8 3206.9 to read:

(N)3206.8 3206.9 Fire department hose connections. Where a standpipe system is required for exit passageways provided, it shall be maintained in accordance with Chapter 9 and remain in accordance with the applicable building code.

18. Change Section 3206.9 3206.10 to read:

(N)3206.9 3206.10 Aisles. Aisles separating storage piles or racks shall be maintained unobstructed and remain in accordance with the approved storage plan in Section 3201.3 and in accordance with the applicable building code.

19. Change Section 3206.9.1 3206.10.1 to read:

#### **Exceptions:**

1. Aisles crossing rack structures or storage piles, which are used only for employee access, shall be a minimum of 24 inches (610 mm) wide.

2. Aisles separating shelves classified as shelf storage shall be a minimum of 30 inches (762 mm) wide.

20. Change Section 3206.9.1.1 3206.10.1.1 to read:

(N)3206.9.1.1 3206.10.1.1 Sprinklered buildings. Aisles in sprinklered buildings shall be maintained in accordance with the applicable building code.

21. Change Section 3206.9.1.2 3206.10.1.2 to read:

(N)3206.9.1.2 3206.10.1.2 Nonsprinklered buildings. Aisles in nonsprinklered buildings shall be maintained in accordance with the applicable building code.

22. Change Section 3206.9.2 3206.10.2 to read:

(N)3206.9.2 3206.10.2 Clear height. The required aisle width shall be maintained from the floor to ceiling in accordance with the approved storage plan in Section 3201.3 and in accordance with the applicable building code. Rack structural supports and catwalks are allowed to cross aisles at a minimum height of 6 feet 8 inches (2032 mm) above the finished floor level, provided that such supports do not interfere with fire department hose stream trajectory.

23. Delete Change Section 3206.9.3. 3206.10.3 to read:

3206.10.3 Dead ends. Dead-end aisles shall not exceed the approved storage plan in section 3201.3.

- D. The following changes shall be made to Section 3207, Solid-Piled and Shelf Storage:
  - 1. Change Section 3207.2 to read:

(N)3207.2 3207.2 Fire protection. Where automatic sprinklers are provided, they shall be maintained in accordance with the applicable building code.

2. Change Section 3207.2.1 to read:

(N)3207.2.1 3207.2.1 Shelf storage. Shelf storage greater than 12 feet (3658 mm) but less than 15 feet (4572 mm) in height shall be in accordance with the fire protection requirements set forth in the applicable building code. Shelf storage 15 feet (4572 mm) or more in height shall be protected in an approved manner as required by this code and the applicable building code.

3. Change Section 3207.3 to read:

(N)3207.3 3207.3 Pile dimension and height limitations. Pile dimensions, the maximum permissible storage height and pile volume shall be <u>maintained</u> in accordance with the <u>approved storage plan in Section 3201.3 and remain in accordance with the</u> applicable building code.

4. Change Section 3207.4 to read:

(N)3207.4 Array 3207.4 Arrays. Where an automatic sprinkler system design utilizes protection based on a closed array, array clearances shall be maintained as specified by the standard used and approved storage plan in Section 3201.3.

- E. The following changes shall be made to Section 3208, Rack Storage:
  - 1. Change Section 3208.2 to read:

(N)3208.2 3208.2 Fire protection. Where automatic sprinklers are provided, they shall be maintained in accordance with the applicable building code Chapter 9.

2. Change Section 3208.2.2 to read:

(N)3208.2.2 3208.2.2 Racks with solid shelving. Racks with solid shelving having an area greater than 20 square feet (1.9 m²), measured between approved flue spaces at all four edges of the shelf, shall be in accordance with this section.

#### Exceptions:

- 1. Racks with mesh, grated, slatted or similar shelves having uniform openings not more than 6 inches (152 mm) apart, comprising not less than 50% of the overall shelf area, and with approved flue spaces are allowed to be treated as racks without solid shelves.
- 2. Racks used for the storage of combustible paper records with solid shelving shall be in accordance with the applicable building code NFPA 13 standard.
- 3. Change Section 3208.2.2.1 to read:

(N)3208.2.2.1 3208.2.2.1 Fire protection. Fire protection for racks with solid shelving shall be in accordance with the applicable building code.

4. Delete Change Section 3208.3 and Table 3208.3. to read:

3208.3 Flue spaces. Flue spaces shall be maintained in accordance with Table 3208.3 or the approved storage plan in Section 3201.3 and remain in accordance with the applicable building code.

5. Change Section 3208.3.1 to read:

(N)3208.3.1 3208.3.1 Flue space protection. Where required by the fire code official, flue spaces required by the applicable building code, in single-row, double-row, or multiple-row rack storage installations shall be equipped with approved devices to protect the required flue spaces. Such devices shall not be removed or modified.

6. Change Section 3208.4 to read:

(N)3208.4 3208.4 Column protection. Protection for steel building columns shall be maintained in accordance with approved storage plan in Section 3201.3 and Chapter 9 and remain in accordance with the applicable building code.

#### 7. Change Section 3208.5 to read:

(N)3208.5 3208.5 Extra-high-rack storage systems. Approval shall be obtained prior to installing extra high rack combustible storage.

#### 8. Change Section 3208.5.1 to read:

(N)3208.5.1 3208.5.1 Fire protection. Fire protection provided for buildings with extra high rack combustible storage shall be maintained in accordance with the applicable building code.

## F. The following changes shall be made to Section 3209, Automated Storage:

#### 1. Change Section 3209.2 to read:

(N)3209.2 3209.2 Automatic sprinklers. Where automatic sprinklers are provided, they shall be maintained in accordance with the applicable building code NFPA 13 standard.

#### 2. Change Section 3209.3 to read:

(N)3209.3 3209.3 Carousel storage. High-piled storage areas having greater than 500 square feet (46 m²) of carousel storage, including automatic shutdown devices, shall be maintained in accordance with the approved storage plan in Section 3201.3 and shall be maintained in accordance with the applicable building code.

#### 3. Change Section 3209.4 to read:

(N)3209.4 3209.4 Automated rack storage. High-piled storage areas with automated rack storage shall be maintained in accordance with the applicable building code. The switch shall be clearly identified and shall be in a location approved. approved storage plan in Section 3201.3. A manually activated emergency shutdown switch for use by emergency personnel shall be clearly identified and shall be maintained and accessible in accordance with the applicable building code.

## G. The following change shall be made to Section 3210, Specialty Storage:

Change Section 3210.1 to read:

(N)3210.1 3210.1 General. Records storage facilities used for the rack or shelf storage of combustible paper records greater than 12 feet (3658 mm) in height shall be maintained in accordance with Sections 3206 and 3208, the approved storage plan in Section 3201.3, and remain in accordance with the applicable building code. Palletized storage of records shall be in accordance with the applicable building code Section 3207.

## 13VAC5-51-144.5. Chapter 33 Fire Safety During Construction and Demolition.

Change Section 3314.1 to read:

3314.1 Completion before occupancy. In buildings where an automatic sprinkler system is required by this code or the applicable building code, it shall be unlawful to occupy any portion of a building or structure until the automatic sprinkler system installation has been tested and approved, except as provided in Section 106 the building, or portion thereof, shall not be occupied until the automatic sprinkler system has been tested and approved, except where approved by the building official.

## 13VAC5-51-144.6. IFC Chapter 34 Tire Rebuilding and Tire Storage.

#### A. Change Section 3401.1 to read:

3401.1 Scope. The maintenance and operation of tire rebuilding plants, tire storage, and tire byproduct facilities shall comply with this chapter, and other applicable requirements of this code, and NFPA 13, as originally approved. Tire storage in buildings shall also comply with Chapter 32.

#### B. Change Section 3401.2 to read:

3401.2 Permit required. Permits shall be required as set forth in Section 107.2.

#### C. Change Section 3403.1 to read:

(N)3403.1 3403.1 Construction. Tire rebuilding plants shall comply with maintain the requirements of the applicable building code, as to construction, separation from other buildings or other portions of the same building, and protection.

#### D. Delete Change Section 3403.2: to read:

3403.2 Location. Unless otherwise approved by the applicable building code, buffing operations shall be located in a room separated from the remainder of the building housing the tire rebuilding or tire recapping operations by a fire-resistance rated separation in accordance with the applicable building code.

#### E. Change Section 3406.1 to read:

3406.1 Required access. New and existing tire storage yards shall be provided with fire apparatus access roads in accordance with Section 503 and Section 3406.2.

#### 13VAC5-51-144.8. IFC Chapter 36 Marinas.

#### A. Change Section to read:

(N)3603.5 3603.5 Electrical equipment. Electrical equipment shall be maintained in accordance with its listing, Section 605 of this code, and NFPA 303 as required for wet, damp, and hazardous locations.

B. Change Section 3604.2 to read:

(N)3604.2 3604.2 Standpipes. Standpipes provided for marinas and boatyards shall be maintained in accordance with the applicable building code. Marinas and boatyards equipped with standpipe systems shall be maintained in accordance with NFPA 303 and Chapter 9.

#### 13VAC5-51-144.9. IFC Chapter 37 Combustible Fibers.

A. Change Section 3701.3 to read:

3701.3 Permits. Permits shall be required as set forth in Section 107.2.

B. Change Section 3703.5 to read:

(N)3703.5 3703.5 Dust collection. Dust collection and exhaust systems required or provided for Where located within a building, equipment or machinery that generates or emits combustible fibers shall be maintained in accordance with the applicable building code operated with an approved dust-collecting and exhaust system in accordance with the applicable building code and maintained in accordance with Chapter 22.

C. Change Section 3704.3 to read:

(N)3704.3 3704.3 Storage of more than 100 cubic feet to 500 cubic feet. Loose combustible fibers in quantities exceeding 100 cubic feet (3 m³) but not exceeding 500 cubic feet (14 m³) shall be stored in rooms in accordance with the applicable building code.

Note: These rooms are typically required to be fire resistance rated in accordance with the applicable building code.

D. Change Section 3704.4 to read:

(N)3704.4 3704.4 Storage of more than 500 cubic feet to 1,000 cubic feet. Loose combustible fibers in quantities exceeding 500 cubic feet (14 m³) but not exceeding 1,000 cubic feet (28 m³) shall be stored in rooms in accordance with the applicable building code.

Note: These rooms are typically required to be fire resistance rated in accordance with the applicable building code.

E. Change Section 3704.5 to read:

(N)3704.5 3704.5 Storage of more than 1,000 cubic feet. Loose combustible fibers in quantities exceeding 1,000 cubic feet (28 m³) shall be stored in rooms in accordance with the applicable building code.

Note: These rooms may be required to be fire resistance rated and protected by fire suppression systems in accordance with the applicable building code.

## 13VAC5-51-145. IFC Chapter 50 Hazardous Materials - General Provisions.

A. The following changes shall be made to Section 5001, General:

1. Change Section 5001.1 to read:

5001.1 Scope. Prevention, control and mitigation of dangerous conditions related to storage, dispensing, use and handling of hazardous materials shall be in accordance with this chapter for operational usage. Quantities within buildings shall be maintained in accordance with the applicable building code.

This chapter shall apply to all hazardous materials, including those materials regulated elsewhere in this code, except that where specific requirements are provided in other chapters, those specific requirements shall apply in accordance with the applicable chapter. Where a material has multiple hazards, all hazards shall be addressed.

- 1. In retail or wholesale sales occupancies, the quantities of medicines, foodstuff or consumer products, and cosmetics containing not more than 50% by volume of water-miscible liquids and with the remainder of the solutions not being flammable shall not be limited, provided such materials are packaged in individual containers not exceeding 1.3 gallons (5 L).
- 2. Quantities of alcoholic beverages in retail or wholesale sales occupancies shall not be limited providing the liquids are packaged in individual containers not exceeding 1.3 gallons (5 L).
- 3. Application and release of pesticide and agricultural products and materials intended for use in weed abatement, erosion control, soil amendment, or similar applications where applied in accordance with the manufacturer's instructions and label directions.
- 4. The offsite transportation of hazardous materials where in accordance with U.S. Department of Transportation regulations.
- 5. Building materials not otherwise regulated by this code.
- 6. Refrigeration systems (see Section 606).
- 7. Stationary storage battery systems regulated by Section 608.
- 8. The display, storage, sale or use of fireworks and explosives in accordance with Chapter 56.
- 9. Corrosives utilized in personal and household products in the manufacturer's original consumer packaging in Group M occupancies.

- 10. The storage of distilled spirits and wines in wooden barrels and casks.
- 11. The use of wall-mounted dispensers containing alcohol-based hand rubs classified as Class I or II liquids where in accordance with Section 5705.5.
- 2. Delete Section 5001.1.1.
- 3. Change Section 5001.3.3.9 to read:

(N)5001.3.3.9 5001.3.3.9 Reliable power source. Where a power supply is relied upon to prevent or control an emergency condition that could endanger people or property, the power supply shall be maintained in accordance with the applicable building code.

4. Change Section 5001.3.3.10 to read:

(N)5001.3.3.10 5001.3.3.10 Ventilation. Where ventilation is required by the applicable building code maintained.

5. Change Section 5001.5 to read:

5001.5 Permits. Permits shall be required as set forth in Section 107.2.

6. Add the following language to the end of Section 5001.5.1 to read:

The HMMP shall be maintained onsite for use by emergency responders and shall be updated not less than annually.

7. Add the following language to the end of Section 5001.5.2 to read:

The HMIS shall be maintained onsite or readily available through another means where approved by the fire code official for use by temporary responders, and shall be updated not less than annually.

- 8. Add Sections 5001.5.3, 5001.5.3.1, and 5001.5.3.2 to read:
  - 5001.5.3 Repository container. When a HMMP or HMIS is required, the owner or operator shall provide a repository container (lock box) or other approved means for the storage of items required in Sections 5001.5.1 and 5001.5.2 so as to be readily available to emergency response personnel.
  - 5001.5.3.1 Location and identification. The repository container (lock box) shall be located, installed and identified in an approved manner.
  - 5001.5.3.2 Keying. All repository containers (lock boxes) shall be keyed as required by the fire code official.
- 9. Add Section 5001.7, including subsections, to read:
  - 5001.7 Operational requirements for Group B teaching and research laboratories. Teaching and research

laboratories in Group B educational occupancies above the 12th grade utilizing Section 430 of the USBC, Part I, Construction, or Section 306.1 of the USBC, Part II, Existing Buildings, shall comply with this section and other applicable requirements of this code. In the case of conflicts between the requirements of Section 430 of the USBC, Part I, Construction, or Section 6 306.1 of the USBC, Part II, Existing Buildings, and provisions of this code other than those set out in this section, Section 430 of the USBC, Part I, Construction, or Section 306.1 of the USBC, Part II, Existing Buildings, as applicable, shall govern.

- 5001.7.1 Chemical safety reviews. Operating and emergency procedures planning and documentation shall be as set out in Sections 5001.3.3.11 through 5001.3.3.17. Such documentation shall be prepared by laboratory safety personnel or special experts and shall be made available in the workplace for reference and review by employees. Copies of such documentation shall be furnished to the fire code official for review upon request.
- 5001.7.2 Hazardous materials handling. Receiving, transporting on site, unpacking, and dispensing of hazardous materials shall be carried out by persons trained in proper handling of such materials and shall be performed in accordance with Chapters 50 through 67, as applicable.
- 5001.7.3 Hazard identification signage. Warning signs for other than building components shall be provided in accordance with Section 5003.5.
- 5001.7.4 Maintenance of equipment, machinery, and processes. Maintenance of equipment, machinery, and processes used with hazardous materials shall comply with Section 5003.2.6.
- 5001.7.5 Time sensitive materials. Containers of materials that have the potential to become hazardous during prolonged storage shall be dated when first opened and shall be managed in accordance with NFPA 45, Section 8.2.4.4.1.
- 5001.7.6 Maintenance of storage, dispensing, use, and handling requirements. Storage, dispensing, use, and handling requirements in the USBC, Part I, Construction, or the USBC, Part II, Existing Buildings, shall be maintained. Operational requirements not affecting the manner of construction shall comply with this chapter and Chapters 51 through 67, as applicable.
- 5001.7.7 Hazardous wastes. Storage, dispensing, use, and handling of hazardous waste shall comply with this chapter and Chapters 51 through 67, as applicable.
- 5001.7.8 Container size. The maximum container size for all hazardous materials shall be 5.3 gallons (20 L) for

liquids, 50 pounds (23 kg) for solids, 100 cubic feet (2.8. m<sup>3</sup>) for health hazard gases per Table 5003.1.1(2), and 500 cubic feet (14 m<sup>3</sup>) for all other gases in accordance with Table 5003.1.1(1).

Exception: Hazardous waste collection containers, for other than Class I and Class II flammable liquids, are permitted to exceed 5.3 gallons (20 L) where approved.

5001.7.9 Density. Quantities of Classes I, II, and IIIA combustible or flammable liquids in storage and use within control areas or laboratory suites shall not exceed 8 gallons per 100 square feet (30 L/9.3 m<sup>2</sup>) of floor area, with not more than 4 gallons per 100 square feet (15 L/9.3 m<sup>2</sup>) being in use. Quantities of Class I flammable liquids in storage and use shall not exceed 4 gallons per 100 square feet (15 L/9.3 m<sup>2</sup>) of floor area with not more than 2 gallons (7.5 L) being in use. The maximum in use in open systems is limited to 10% of these quantities. Densities shall be reduced by 25% on the 4th-floor through 6th-floor levels above grade plane of the building and 50% above the 6th-floor level. The density is to be reduced to 50% of these values for buildings that are not protected throughout with an approved automatic fire sprinkler system. Regardless of the density, the maximum allowable quantity per control area or laboratory suite shall not be exceeded.

Exception: Density limits may be exceeded in designated hazardous waste collection areas or rooms within a control area or laboratory suite, but stored quantities shall not exceed the maximum allowable quantity per laboratory suite or control area.

5001.7.10 Restricted materials in storage. Storage of pyrophorics and Class 4 oxidizers prohibited by Table 5003.1.1(1) in existing buildings not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the USBC, Part I, Construction, shall be allowed within a control area at 25% of the limits in Table 5003.1.1(1) for a building

- equipped throughout with an automatic sprinkler system, with no additional increases allowed, provided that such materials are stored in accordance with all of the following:
- 1. Containers shall be completely sealed and stored according to the manufacturer's recommendations.
- 2. Storage shall be within approved hazardous materials storage cabinets in accordance with Section 5003.8.7 or shall be located in an inert atmosphere glove box in accordance with NFPA 45, Section 7.11.
- 3. The storage cabinet or glove box shall not contain any storage of incompatible materials.
- 5001.7.11 Restricted materials in use. Use of pyrophorics and Class 4 oxidizers prohibited by Table 5003.1.1(1) in existing buildings not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the USBC, Part I, Construction, shall be allowed within a control area at 25% of the limits in Table 5003.1.1(1) for buildings equipped throughout with an automatic sprinkler system, with no additional increases allowed, provided that such materials are used in accordance with all of the following:
- 1. Use shall be within an approved chemical fume hood listed in accordance with UL 1805, or in an inert atmosphere glove box in accordance with NFPA 45, Section 7.11, or other approved equipment designed for the specific hazard of the material.
- 2. Combustible materials shall be kept at least 2 feet (610 mm) away from the work area, except for those items directly related to the research.
- 3. A portable fire extinguisher appropriate for the specific material shall be provided within 20 feet (6096 mm) of the use in accordance with Section 906.
- B. The following changes shall be made to Section 5003, General Requirements:
- 1. Add a new "Permissible fireworks" row to Table 5003.1.1(1) and change footnotes d and f to read:

Permissible fireworks 1.4	H-3	125 <sup>d,e,l</sup>	N/A						
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- d. Maximum allowable quantities shall be increased 100% in buildings equipped throughout with an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard. Where Note e applies, the increase for both Notes shall be applied accumulatively.
- f. Quantities shall not be limited in a building equipped throughout with an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard.

2. Delete Change footnote d of Table 5003.1.1(2) and delete Sections 5003.1.3 and 5003.1.4.

#### Footnote d to read:

- d. Maximum allowable quantities shall be increased 100% in buildings equipped throughout with an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard. Where Note e applies, the increase for both Notes shall be applied accumulatively.
- 3. Change Section 5003.2 to read:

(N)5003.2 5003.2 Systems, equipment and processes. Systems, equipment and processes utilized for storage, dispensing, use or handling of hazardous materials shall be maintained in accordance with the applicable building code.

4. Change Section 5003.2.1 to read:

(N)5003.2.1 5003.2.1 Design and construction of containers, cylinders and tanks. Portable containers and cylinders shall be designed and constructed in accordance with approved standards. Containers, cylinders, and other means used for containment of hazardous materials shall be of an approved type. Pressure vessels not meeting U.S. Department of Transportation requirements for transportation shall comply with the ASME Boiler and Pressure Vessel Code.

Tanks shall be maintained in accordance with the applicable building code.

5. Change Section 5003.2.2 to read:

(N)5003.2.2 5003.2.2 Piping, tubing, valves and fittings. Piping, tubing, valves, and fittings conveying hazardous materials shall be maintained in accordance with the applicable building code.

- 6. Delete Section 5003.2.2.1.
- 7. Change Section 5003.2.2.2 to read:

(N)5003.2.2.2 5003.2.2.2 Additional regulations for supply piping for health-hazard materials. Supply piping and tubing for gases and liquids shall be maintained in accordance with the applicable building code.

8. Change Section 5003.2.3 to read:

(N)5003.2.3 5003.2.3 Equipment, machinery and alarms. Equipment and machinery associated with the use, storage or handling of hazardous materials shall be listed or approved.

9. Change Section 5003.2.4 to read:

(N)5003.2.4 5003.2.4 Installation of tanks. Installation of tanks shall be in accordance with Sections 5003.2.4.1 through 5003.2.4.2.1.

- 10. Change Section 5003.2.4.1 to read:
  - (N)5003.2.4.1 5003.2.4.1 Underground tanks. Underground tanks used for the storage of liquid hazardous materials shall be maintained in accordance with the applicable building code.
- 11. Change Section 5003.2.4.2 to read:

(N)5003.2.4.2 5003.2.4.2 Aboveground tanks. Aboveground stationary tanks used for the storage of hazardous materials shall be maintained in accordance with the requirements for outdoor storage of the particular material involved.

- 12. Delete Section 5003.2.7.
- 13. Change Section 5003.2.8 to read:

(N)5003.2.8 5003.2.8. Seismic protection. Where provided, bracing and anchoring for machinery and equipment utilizing hazardous materials shall be maintained in accordance with the applicable building code.

- 14. 5003.2.9.1 Equipment, devices and systems requiring testing. The following equipment, systems, and devices shall be tested in accordance with Sections 5003.2.9 and 5003.2.9.2.
  - 1. Gas detection systems, alarms, and automatic emergency shutoff valves required by Section 6004.2.2.10 for highly toxic and toxic gases.
  - 2. Limit control systems for liquid level, temperature and pressure required by Sections 5004.8 and 5005.1.4.
  - 3. Emergency alarm systems and supervision required by Sections 5004.9 and 5005.4.4.
  - 4. Monitoring and supervisory systems required by the applicable building code.
  - 5. Manually activated shutdown controls required by the applicable building code for compressed gassystems conveying pyrophoric gases.
- 15. Change Section 5003.3.1.4 to read:

5003.3.1.4 Responsibility for cleanup. The person, firm, or corporation responsible for an unauthorized discharge shall institute and complete all actions necessary to remedy the effects of such unauthorized discharge, whether sudden or gradual, at no cost to the jurisdiction. The fire code official may require records and receipts to verify cleanup and proper disposal of unauthorized discharges. When deemed necessary by the fire code official, cleanup may be initiated by the fire department or by an authorized individual or firm. Costs associated with such cleanup shall be the responsibility of the owner, operator, or other person responsible for the unauthorized discharge.

Note: Owners and operators of certain underground and aboveground petroleum storage tanks may have access to the Virginia Petroleum Storage Tank Fund for reimbursement of some cleanup costs associated with petroleum discharges from these tanks. See Article 10 (§ 62.1-44.34:10 et seq.) of Title 62.1of the Code of Virginia.

- 16. Delete Section 5003.8.
- 17. Change Section 5003.8.1 to read:

(N)5003.8.1 5003.8.1 Buildings. Buildings, or portions thereof, in which hazardous materials are stored, handled or used shall be maintained in accordance with the applicable building code.

- 18. Delete Section 5003.8.2 and Table 5003.8.2.
- 19. Change Section 5003.8.3 to read:

(N)5003.8.3 <u>5003.8.3</u> Control areas. Control areas shall comply with Sections 5003.8.3.2 through 5003.8.3.4.

- 20. Delete Section 5003.8.3.1.
- 21. Change Section 5003.8.3.2 to read:

(N)5003.8.3.2 5003.8.3.2 Percentage of maximum allowable quantities. The percentage of maximum allowable quantities of hazardous materials per control area allowed at each floor level within a building shall be maintained in accordance with the applicable building code.

- 22. Delete Table 5003.8.3.2.
- 23. Change Section 5003.8.3.3 to read:

(N)5003.8.3.3 5003.8.3.3 Number. The maximum number of control areas per floor within a building shall be maintained in accordance with the applicable building code

24. Change Section 5003.8.3.4 to read:

(N)5003.8.3.4 5003.8.3.4 Fire-resistance-rating requirements. The required fire-resistance rating for control areas shall be maintained in accordance with the applicable building code.

- 25. Delete <u>Section</u> <u>Sections</u> 5003.8.3.5 <u>through</u> 5003.8.3.5.3.
- 26. Delete Section 5003.8.4.
- 27. Delete Section 5003.8.4.1.
- 28. Change Section 5003.8.4.2 to read:

(N)5003.8.4.2 5003.8.4.2 Ventilation system. The ventilation system for gas rooms shall be maintained in accordance with the applicable building code.

29. Change Section 5003.8.5 to read:

(N)5003.8.5 5003.8.5 Exhausted enclosures. Where an exhausted enclosure is used to increase maximum allowable quantity per control area, the exhausted enclosure shall be maintained in accordance with the applicable building code.

- 30. Delete Section 5003.8.5.1.
- 31. Change Section 5003.8.5.2 to read:

(N)5003.8.5.2 5003.8.5.2 Ventilation. The ventilation system for exhausted enclosures shall be maintained in accordance with the applicable building code.

32. Change Section 5003.8.5.3 to read:

(N)5003.8.5.3 5003.8.5.3 Fire-extinguishing system. Fire-extinguishing systems required for exhaust enclosures shall be maintained in accordance with the applicable building code.

33. Change Section 5003.8.6.2 to read:

(N)5003.8.6.2 5003.8.6.2 Ventilation. The ventilation system for gas cabinets shall be maintained in accordance with the applicable building code.

34. Change Section 5003.9.9 to read:

(N)5003.9.9 5003.9.9 Shelf storage. Shelving shall be maintained in accordance with the applicable building code.

35. Change Section 5003.11 to read:

(N)5003.11 5003.11 Group M storage and display and Group S storage. The aggregate quantity of nonflammable solid and nonflammable or noncombustible liquid hazardous materials stored and displayed within a single control area of a Group M occupancy, or an outdoor control area, or stored in a single control area of a Group S occupancy shall be maintained in accordance with the applicable building code.

36. Change Section 5003.11.1 to read:

(N)5003.11.1 5003.11.1 Maximum allowable quantity per control area in Group M or S occupancies. The aggregate amount of nonflammable solid and nonflammable or noncombustible liquid hazardous materials stored and displayed within a single control area of a Group M occupancy or stored in a single control area of a Group S occupancy shall not exceed the amounts set forth in the applicable building code.

- 37. Delete Table 5003.11.1.
- 38. Change Section 5003.11.2 to read:

(N)5003.11.2 5003.11.2 Maximum allowable quantity per outdoor control area in Group M or S occupancies.

The aggregate amount of nonflammable solid and nonflammable or noncombustible liquid hazardous materials stored and displayed within a single outdoor control area of a Group M occupancy shall not exceed the amounts set forth in the applicable building code.

39. Change Section 5003.11.3 to read:

(N)5003.11.3 5003.11.3 Storage and display. Storage and display shall be maintained in accordance with the applicable building code.

- 40. Delete Section 5003.11.3.1.
- 41. Change Section 5003.11.3.2 to read:

(N)5003.11.3.2 5003.11.3.2 Storage and display height. Display height shall not exceed 6 feet (1829 mm) above the finished floor in display areas of Group M occupancies unless approved by the applicable building code.

Storage height shall not exceed 8 feet (2438 mm) above the finished floor in storage areas of Group M and Group S occupancies unless approved by the applicable building code.

42. Change Section 5003.11.3.4 to read:

(N)5003.11.3.4 5003.11.3.4 Racks and shelves. Racks and shelves used for storage or display shall be maintained in accordance with the applicable building code.

43. Change Section 5003.11.3.8 to read:

(N)5003.11.3.8 5003.11.3.8 Floors. Floors shall be maintained in accordance with the applicable building code.

- C. The following changes shall be made to Section 5004, Storage:
  - 1. Change Section 5004.1 to read:

(N)5004.1 5004.1 Scope. Storage of hazardous materials shall be maintained in accordance with the applicable building code. Retail and wholesale storage and display of nonflammable solid and nonflammable and noncombustible liquid hazardous materials in Group M occupancies and Group S storage shall be maintained in accordance with the applicable building code.

2. Change Section 5004.2 to read:

(N)5004.2 5004.2 Spill control and secondary containment for liquid and solid hazardous materials. Spill control and secondary containment for rooms, buildings or areas used for the storage of liquid or solid hazardous materials shall be maintained in accordance with the applicable building code.

Exception: Outdoor storage of containers on approved containment pallets in accordance with Section 5004.2.3.

- 3. Delete Section 5004.2.1.
- 4. Delete Section 5004.2.2 and Table 5004.2.2.
- 5. Delete Section 5004.2.2.1.
- 6. Delete Section 5004.2.2.3.
- 7. Delete Section 5004.2.2.5.
- 8. Change Section 5004.2.2.6 to read:

(N)5004.2.2.6 5004.2.2.6 Drainage system design. Drainage systems shall be in accordance with the applicable building code.

9. Change Section 5004.3 to read:

(N)5004.3 5004.3 Ventilation. Ventilation required for indoor storage areas and storage buildings shall be maintained in accordance with the applicable building code.

- 10. Delete Section 5004.3.1.
- 11. Change Section 5004.5 to read:

(N)5004.5 5004.5 Automatic sprinkler systems. Automatic sprinkler systems for the storage of hazardous materials shall be maintained in accordance with the applicable building code.

12. Change Section 5004.6 to read:

(N)5004.6 5004.6 Explosion control. Explosion control for storage rooms, areas and buildings shall be maintained in accordance with the applicable building code.

13. Change Section 5004.7 to read:

(N)5004.7 5004.7 Standby or emergency power. Standby or emergency power shall be maintained in accordance with the applicable building code.

- 14. Delete Section 5004.7.1.
- 15. Delete Section 5004.7.2.
- 16. Change Section 5004.8 to read:

(N)5004.8 5004.8 Limit controls. Limit controls shall be maintained in accordance with the applicable building code.

- 17. Delete Section 5004.8.1.
- 18. Delete Section 5004.8.2.
- 19. Change Section 5004.9 to read:

(N)5004.9 5004.9 Emergency alarm. Emergency alarm systems shall be maintained in accordance with the applicable building code.

- 20. Delete Section 5004.10.
- 21. Delete Section 5004.12.
- 22. Change Section 5004.13 to read:

(N)5004.13 5004.13 Weather protection. Where overhead noncombustible construction is provided for sheltering outdoor hazardous material storage areas, such storage shall not be considered indoor storage where the area is constructed in accordance with the requirements for weather protection as required by the applicable building code.

Exception: Storage of explosive materials shall be considered as indoor storage.

- D. The following changes shall be made to Section 5005, Use, Dispensing and Handling:
  - 1. Change Section 5005.1 to read:

(N)5005.1 5005.1 General. Use, dispensing and handling of hazardous materials shall be maintained in accordance with the applicable building code.

- 2. Delete Section 5005.1.2.
- 3. Change Section 5005.1.3 to read:

(N)5005.1.3 5005.1.3 Spill control and secondary containment for hazardous material liquids. Where required by the applicable building code, spill control and secondary containment shall be maintained in accordance with the applicable building code.

4. Change Section 5005.1.4 to read:

(N)5005.1.4 5005.1.4 Limit controls. Limit controls shall be maintained in accordance with the applicable building code.

- 5. Delete Section 5005.1.4.1.
- 6. Delete Section 5005.1.4.2.
- 7. Delete Section 5005.1.4.3.
- 8. Delete Section 5005.1.4.4.
- 9. Change Section 5005.1.5 to read:

(N)5005.1.5 5005.1.5 Standby or emergency power. Standby or emergency power shall be maintained in accordance with the applicable building code.

- 10. Delete Section 5005.1.5.1.
- 11. Delete Section 5005.1.6.
- 12. Change Section 5005.1.7 to read:

(N)5005.1.7 5005.1.7 Lighting. Lighting provided for use, dispensing and handling of hazardous materials shall be maintained in accordance with the applicable building code.

13. Change Section 5005.1.8 to read:

(N)5005.1.8 5005.1.8 Fire-extinguishing systems. Fire-extinguishing systems for rooms or areas in which hazardous materials are dispensed or used shall be maintained in accordance with the applicable building code.

14. Change Section 5005.1.9 and delete Sections 5005.1.11 and 5005.1.12.

Section 5005.1.9 to read:

(N)5005.1.9 5005.1.9 Ventilation. Ventilation for indoor dispensing and use areas shall be maintained in accordance with the applicable building code.

15. Change Section 5005.2.1 5005.2 to read:

5005.2 Indoor dispensing and use. Indoor dispensing and use of hazardous materials shall be in buildings complying with the International Building Code and in accordance with Section 5005.1, Sections 5005.2.1 through 5005.2.1.4, and Sections 5005.2.2.1 through 5005.2.2.4.

16. Change Section 5005.2.1.3 to read:

5005.2.1.3 Spill control for hazardous material liquids. Buildings, rooms, or areas where hazardous material liquids are dispensed into vessels exceeding a 1.3-gallon (5 L) capacity or used in open systems exceeding a 5.3-gallon (20 L) capacity shall be provided with spill control in accordance with the applicable building code.

17. Change Section 5005.2.1.4 to read:

(N)5005.2.1.4 5005.2.1.4 Secondary containment for hazardous material liquids. Where required by the applicable building code, secondary containment for buildings, rooms or areas where hazardous material liquids are dispensed or used in open systems shall be maintained in accordance with the applicable building code.

- 18. Delete Table 5005.2.1.4.
- 19. Delete Section 5005.2.2.
- 20. Change Section 5005.2.2.1 to read:

(N)5005.2.2.1 5005.2.2.1 Ventilation. Ventilation for closed systems shall be maintained in accordance with the applicable building code.

21. Change Section 5005.2.2.2 to read:

(N)5005.2.2.2 5005.2.2.2 Explosion control. Explosion control shall be maintained in accordance with the applicable building code.

#### 22. Change Section 5005.2.2.3 to read:

(N)5005.2.2.3 5005.2.2.3 Spill control for hazardous material liquids. Spill control for buildings, rooms or areas where hazardous material liquids are used shall be maintained in accordance with the applicable building code.

#### 23. Change Section 5005.2.2.4 to read:

(N)5005.2.2.4 5005.2.2.4 Secondary containment for hazardous material liquids. Secondary containment for buildings, rooms or areas where hazardous material liquids are used shall be maintained in accordance with the applicable building code.

#### 24. Change Section 5005.3.4 to read:

5005.3.4 Spill control for hazardous material liquids in open systems. Outdoor areas where hazardous material liquids are dispensed in vessels exceeding a 1.3-gallon (5 L) capacity or used in open systems exceeding a 5.3-gallon (20 L) capacity shall be provided with spill control in accordance with the applicable building code.

#### 25. Change Section 5005.3.5 to read:

5005.3.5 Secondary containment for hazardous material liquids in open systems. Where required, outdoor areas where hazardous material liquids are dispensed or used in open systems shall be provided with secondary containment in accordance with the applicable building code where the capacity of an individual vessel or system or the capacity of multiple vessels or systems exceeds the following:

- 1. Individual vessel or system: greater than 1.3 gallons (5 I )
- 2. Multiple vessels or systems: greater than 5.3 gallons (20 L).

#### 26. Change Section 5005.3.6 to read:

5005.3.6 Spill control for hazardous material liquids in closed systems. Outdoor areas where hazardous material liquids are used in closed systems exceeding 55 gallons (208 L) shall be provided with spill control in accordance with the applicable building code.

#### 27. Change Section 5005.3.7 to read:

5005.3.7 Secondary containment for hazardous material liquids in closed systems. Where required, outdoor areas where hazardous material liquids are dispensed or used in closed systems shall be provided with secondary containment in accordance with the applicable building code where the capacity of an individual vessel or system or the capacity of multiple vessels or systems exceeds the following:

- 1. Individual vessel or system greater than 55 gallons (208 L).
- 2. Multiple vessels or systems greater than 1,000 gallons (3785 L).

#### 28. Change Section 5005.3.9 to read:

5005.3.9 Weather protection. Where overhead noncombustible construction is provided for sheltering outdoor hazardous material use areas, such use shall not be considered indoor use where the area is constructed in accordance with the requirements for weather protection as required in the applicable building code.

Exception: Use of explosive materials shall be considered as indoor use.

#### 29. Change Section 5005.4 to read:

(N)5005.4 5005.4 Handling. Handling of hazardous materials shall be maintained in accordance with the applicable building code.

#### 30. Change Section 5005.4.1 to read:

(N)5005.4.1 5005.4.1 Quantities exceeding the maximum allowable quantity per control area. Handling of hazardous materials in outdoor locations in amounts exceeding the maximum allowable quantity per the applicable building code shall be in accordance with Sections 5001, 5003, 5005.1 and 5005.4.

#### 31. Change Section 5005.4.2 to read:

(N)5005.4.2 5005.4.2 Quantities not exceeding the maximum allowable quantity per control area. Handling of hazardous materials in outdoor locations in amounts not exceeding the maximum allowable quantity per the applicable building code shall be in accordance with Sections 5001 and 5003.

#### 32. Change Section 5005.4.4 to read:

(N)5005.4.4 5005.4.4 Dispensing, use and handling. Where hazardous materials having a hazard ranking of 3 or 4 are being transported through corridors, interior exit stairways or ramps or exit passageways, such transportation shall be in accordance with the applicable building code.

#### 13VAC5-51-145.5. IFC Chapter 51 Aerosols.

#### A. Change Section 5101.1 to read:

5101.1 Scope. The provisions of this chapter and NFPA 30B shall apply to the manufacturing, storage and display of aerosol products. Manufacturing of aerosol products using hazardous materials shall also comply with Chapter 50.

- B. Change Section 5101.2 to read:
- 5101.2 Permit required. Permits shall be required as set forth in Section 107.2.
- C. Change Sections 5104.1 and, 5104.1.1, 5104.1.2.1, 5104.2, and 5104.2.2 to read:
  - (N)5104.1 5104.1 General. The inside storage of Levels 2 and 3 aerosol products shall be maintained in accordance with the applicable building code.
  - 5104.1.1 Plastic containers. Aerosol products in plastic containers larger than 4 fluid ounces (118 ml), but not to exceed 33.8 fluid ounces (1000 ml), shall be allowed only where in accordance with this section. The commodity classification shall be Class III commodities, as defined in the applicable NFPA 13 standard where any of the following conditions are met:
  - 1. Base product has no fire point where tested in accordance with ASTM D 92, and nonflammable propellant.
  - 2. Base product has no sustained combustion as tested in accordance with Appendix H, "Method of Testing for Sustained Combustibility," in U.S. Department of Transportation 49 CFR Part 173, and nonflammable propellant.
  - 3. Base product contains up to 20 percent 20% by volume (15.8 percent (15.8% by weight) of ethanol or isopropyl alcohol, or both, in an aqueous mix, and nonflammable propellant.
  - 4. Base product contains 4 percent 4.0% by weight or less of an emulsified flammable liquefied gas propellant within an aqueous base. The propellant shall remain emulsified for the life of the product. Where such propellant is not permanently emulsified, the propellant shall be nonflammable.
  - 5104.1.2.1 Storage, use, or handling. The storage, use, or handling of plastic aerosol X products shall be prohibited unless otherwise specified by the applicable building code.
  - (N)5104.2 5104.2 Storage in Groups A, B, E, F, I, and R. Storage of aerosol products in occupancies in Groups A, B, E, F, I, and R shall be maintained in accordance with the applicable building code.
  - 5104.2.2 Aerosol cooking spray products. Storage of aerosol cooking spray products in Groups A, B, E, F, and R occupancies shall not be more than 1,000 pounds (454 kg) net weight unless otherwise specified by the applicable building code.
- D. Change Section Sections 5104.3 and 5104.3.1 to read:
- (N)5104.3 5104.3 Storage in general purpose warehouses. Aerosol storage in general purpose warehouses shall be

- maintained in accordance with the applicable building code.
- (N)5104.3.1 5104.3.1 Nonsegregated storage. Nonsegregated storage areas shall be maintained in accordance with the applicable building code.
- E. Delete Table 5104.3.1.
- F. Change Section 5104.3.2 to read:
  - (N)5104.3.2 5104.3.2 Segregated storage. Segregated storage areas shall be maintained in accordance with the applicable building code.
- G. Delete Table 5104.3.2.
- H. Change Section 5104.3.2.1 and 5104.3.2.2 to read:
- (N)5104.3.2.1 5104.3.2.1 Chain link fence enclosures. Chain link fence enclosures shall be maintained in accordance with the applicable building code.
- (N)5104.3.2.2 5104.3.2.2 Aisles. The minimum aisle requirements for segregated storage in general purpose warehouses shall be maintained in accordance with the applicable building code.
- I. Delete Table 5104.3.2.2.
- J. Change Section 5104.4 Sections 5104.3.3 through 5104.4.3 to read:
  - 5104.3.3 Aerosol cooking spray products. Solid pile, palletized, or rack storage of aerosol cooking spray products in a general purpose warehouse shall not be more than 2,500 pounds (1135 kg) net weight, unless protected in accordance with NFPA 30B or otherwise specified by the applicable building code.
  - (N)5104.4 5104.4 Storage in aerosol warehouses. The total quantity of Levels 2 and 3 aerosol products in a warehouse utilized for the storage, shipping and receiving of aerosol products shall maintained in accordance with the applicable building code.
  - (N)5104.4.1 5104.4.1 Automatic sprinkler system. Where provided, automatic sprinkler systems protecting aerosol warehouses shall be maintained in accordance with the applicable building code.
  - (N)5104.4.2 5104.4.2 Pile and palletized storage aisles. Travel distance and aisles serving pile and palletized storage shall be maintained in accordance with the applicable building code.
  - (N)5104.4.3 5104.4.3 Rack storage aisles. Rack storage shall be maintained in accordance with the applicable building code.
- K. Delete Section 5104.4.4.

L. Change Section 5104.5 to read:

(N)5104.5 5104.5 Storage in inside flammable liquid storage rooms. Inside flammable liquid storage rooms shall be maintained in accordance with the applicable building code.

M. Delete Sections 5104.5.1 and 5104.5.2.

N. Change Sections 5104.6 and 5104.6.1 to read:

(N)5104.6 5104.6 Storage in liquid warehouses. The storage of aerosol products in liquid warehouses shall be maintained in accordance with the applicable building code.

(N)5104.6.1 5104.6.1 Containment. Spill control or drainage shall be maintained in accordance with the applicable building code.

O. Delete Section 5104.6.2.

P. Change Sections 5104.6.3 and 5104.7 to read:

(N)5104.6.3 5104.6.3 Opening protection into segregated storage areas. Fire doors or gates opening into the segregated storage area shall be maintained in accordance with the applicable building code.

(N)5104.7 5104.7 Storage in Group M occupancies. Storage of aerosol products in occupancies in Group M shall be maintained in accordance with the applicable building code.

Q. Delete Table 5104.7 and Sections 5104.8.1 and 5104.8.2.

R. Change Sections <u>5104.8</u>, 5106.1, and 5106.2.1 to read:

5104.8 Storage of aerosol cooking spray products. Aerosol cooking spray products shall be permitted to be stored in a general purpose warehouse in accordance with the applicable building code.

(N)5106.1 5106.1 General. This section shall apply to the maintenance of retail display of aerosol products.

(N)5106.2.1 5106.2.1 Maximum quantities in retail display areas. Quantities of aerosol products in retail display areas shall be maintained in accordance with the applicable building code.

S. Delete Table 5106.2.1.

T. Change Section Sections 5106.2.2 and 5106.2.3 to read:

5106.2.2 Aerosol cooking spray storage. The storage of aerosol cooking spray products shall comply with the applicable building code.

(N)5106.2.2 5106.2.3 Display of containers aerosol products. Aerosol containers shall be stacked in accordance with the applicable building code.

U. Delete Section 5106.2.3 5106.2.4.

V. Change Sections  $\frac{5106.2.4}{5106.2.5}$  through 5106.4.1 to read:

(N)5106.2.4 5106.2.5 Retail display automatic sprinkler system. Where an automatic sprinkler system is required for the protected retail display of aerosol products, the wetpipe automatic sprinkler system shall be in accordance with the applicable building code NFPA 13 standard.

(N)5106.3 5106.3 Aerosol display and normal merchandising exceeding 8 feet (2438 mm) high. Aerosol display and merchandising exceeding 8 feet in height shall be in accordance with Sections 5106.3.1 through 5106.3.3.

(N)5106.3.1 5106.3.1 Maximum quantities in retail display areas. Aerosol products in retail display areas shall not exceed quantities approved under the applicable building code.

(N)5106.3.2 5106.3.2 Automatic sprinkler protection. Where provided, automatic sprinkler protection for aerosol display and merchandising areas shall be maintained in accordance with the applicable building code.

(N)5106.3.3 5106.3.3 Separation of aerosol areas. Separation of aerosol areas shall be maintained in accordance with the applicable building code.

(N)5106.4 5106.4 Maximum quantities in storage areas. Aerosol products in storage areas adjacent to retail display areas shall not exceed the quantities approved under the applicable building code.

W. Delete Table 5106.4.

X. Change Sections 5106.5 and 5106.5.1 to read:

(N)5106.5 5106.5 Special protection design for Levels 2 and 3 aerosols adjacent to flammable and combustible liquids in double-row racks. The display and merchandising of aerosols adjacent to flammable and combustible liquids in double-row racks shall be maintained in accordance with the applicable building code.

(N)5106.5.1 5106.5.1 Fire protection. Where required, fire protection for the display and merchandising of aerosols in double-row racks shall be maintained in accordance with the applicable building code.

Y. Delete Section 5106.2.3.

Z. Y. Delete Section 5106.5.2.

AA. Z. Change Sections 5106.5.3 through 5106.5.6 to read:

(N)5106.5.3 5106.5.3 Shelving. Shelving in racks shall be maintained in accordance with the applicable building code.

(N)5106.5.4 5106.5.4 Aisles. Aisles shall be maintained between rows of racks and adjacent solidly piled or

palletized merchandise in accordance with the applicable building code.

(N)5106.5.5 5106.5.5 Flue spaces. Flue spaces in racks shall be maintained in accordance with the applicable building code.

(N)5106.5.6 5106.5.6 Horizontal barriers. Horizontal barriers shall be maintained in accordance with the applicable building code.

BB. AA. Delete Sections 5106.5.7 and 5106.5.8.

CC. BB. Change Section 5107.1 to read:

(N)5107.1 5107.1 General. Manufacturing facilities shall be maintained in accordance with the applicable building code.

#### 13VAC5-51-146.5. IFC Chapter 53 Compressed Gases.

A. Change Section 5301.1 to read:

5301.1 Scope. Storage, use and handling of compressed gases in compressed gas containers, cylinders, tanks and systems shall comply with the applicable building code, this chapter, and the use and handling provisions of NFPA 55, including those gases regulated elsewhere in this code. Partially full compressed gas containers, cylinders or tanks containing residual gases shall be considered as full for the purposes of the controls required.

Liquefied natural gas for use as a vehicular fuel shall also comply with NFPA 52 and NFPA 59A.

Compressed gases classified as hazardous materials shall also comply with Chapter 50 for general requirements and chapters addressing specific hazards, including Chapters 58 (Flammable Gases), 60 (Highly Toxic and Toxic Materials), 63 (Oxidizers, Oxidizing Gases and Oxidizing Cryogenic Fluids), and 64 (Pyrophoric Materials).

Compressed hydrogen (CH<sub>2</sub>) for use as a vehicular fuel shall also comply with Chapters 23 and 58 of this code and NFPA 2.

Cutting and welding gases shall also comply with Chapter 35.

LP-gas shall also comply with Chapter 61.

#### **Exceptions:**

- 1. Gases used as refrigerants in refrigeration systems (see Section 606).
- 2. Compressed natural gas (CNG) for use as a vehicular fuel shall comply with Chapter 23, NFPA 52, and the International Fuel Gas Code.
- 3. Cryogenic fluids shall comply with Chapter 55.

B. Change Section 5301.2 to read:

5301.2 Permits. Permits shall be required as set forth in Section 107.2.

C. Change Section 5303.16 to read:

(N)5303.16 5303.16 Vaults. Vaults shall be maintained in accordance with the applicable building code.

- D. Delete Sections 5303.16.1 through 5303.16.3.
- E. Delete Section 5303.16.5.
- F. Delete Sections 5303.16.7 through 5303.16.10.
- G. Delete Sections 5303.16.12 and 5303.16.14.
- H. Change Sections 5305.5 and 5306.2 to read:

(N)5305.5 5305.5 Venting. Venting shall be maintained in accordance with the applicable building code.

(N)5306.2 5306.2 Interior supply location. Medical gases shall be stored in areas approved under the applicable building code.

- I. Delete Sections 5306.2.1 and 5306.2.2.
- J. Change Section 5307.2 Sections 5307.1 through 5307.4.4 and delete Sections 5307.2.1, 5307.4.1, 5307.4.3.1, and 5307.4.6.

<u>Sections 5307.1 through 5307.4.4</u> to read:

K. Delete Section 5307.5.

L. Change Sections 5307.5.1 and 5307.5.2 to read:

(N)5307.5.1 Ventilation. Mechanical ventilation shall be maintained in accordance with the applicable building code.

(N)5307.5.2 Emergency alarm system. Where required under the applicable building code, emergency alarm systems shall be maintained.

M. Delete Section 5308.1.

N. Change Section 5308.2 to read:

(N)5308.2 Ventilation. Where mechanical ventilation is required, it shall be maintained in accordance with the applicable building code.

5307.1 General. Compressed gases in storage or use not regulated by the material-specific provisions of Chapters 6, 54, 55, and 60 through 67, including asphyxiant, irritant, and radioactive gases, shall comply with this section in addition to other requirements of this chapter.

5307.2 Ventilation. Ventilation for indoor storage and use areas and storage buildings shall be maintained in accordance with the applicable building code.

5307.3 Insulated liquid carbon dioxide systems used in beverage dispensing applications. Insulated liquid carbon

- dioxide systems with more than 100 pounds (45.4 kg) of carbon dioxide used in beverage dispensing applications shall comply with Section 5307.3.1.
- 5307.3.1 Ventilation. Mechanical ventilation for areas with carbon dioxide systems shall be maintained in accordance with the applicable building code.
- 5307.3.2 Gas detection system. Gas detection systems for insulated carbon dioxide systems shall be maintained in accordance with the applicable building code.
- 5307.4 Carbon dioxide enrichment systems. The maintenance of carbon dioxide enrichment systems with more than 100 pounds (45.4 kg) of carbon dioxide and carbon dioxide enrichment systems with any quantity of carbon dioxide having a remote fill connection shall comply with Sections 5307.4.2 through 5307.4.7.
- 5307.4.2 Equipment. Pressure relief, vent piping, fill indicators, fill connections, vent terminations, piping systems, and the storage, use, and handling of the carbon dioxide shall be in accordance with the applicable building code.
- 5307.4.3 Gas detection system. Gas detection systems for carbon dioxide enrichment systems shall be maintained in accordance with the applicable building code.
- 5307.4.4 Pressurization and ventilation. Pressurization and ventilation of rooms or indoor areas in which carbon dioxide enrichment is provided shall be maintained in accordance with the applicable building code.
- 5307.2 Permits. Permits shall be required as set forth in Section 107.2.

#### 13VAC5-51-147. IFC Chapter 54 Corrosive Materials.

A. Change Sections 5401.1 and 5401.2 to read:

5401.1 Scope. Maintenance and operational aspects of the storage and use of corrosive materials shall be in accordance with this chapter. Compressed gases shall also comply with Chapter 53.

#### Exceptions:

- 1. Display and storage in Group M and storage in Group S occupancies complying with Section 5003.11.
- 2. Stationary storage battery systems in accordance with Section 608.
- 3. This chapter shall not apply to R-717 (ammonia) where used as a refrigerant in a refrigeration system (see Section 606).
- 5401.2 Permits. Permits shall be required as set forth in Section 107.2.

- B. Change Sections 5403.1 and 5403.2 to read:
- 5403.1 Quantities not exceeding the maximum allowable quantity per control area. The storage and use of corrosive materials in amounts not exceeding the maximum allowable quantity per control area shall be in accordance with the applicable building code.
- 5403.2 Quantities exceeding the maximum allowable quantity per control area. The storage and use of corrosive materials in amounts exceeding the maximum allowable quantity per control area shall be in accordance with the applicable building code.
- C. Change Sections 5404.1.1 and 5404.2.1 to read:
- (N)5404.1.1 <u>5404.1.1</u> Liquid-tight floor. Liquid-tight floors shall be maintained in accordance with the applicable building code.
- (N)5404.2.1 5404.2.1 Aboveground outside storage tanks. Aboveground outside storage tanks shall be maintained in accordance with the applicable building code.
- D. Change Section 5405.1.2 to read:
- (N)5405.1.2 5405.1.2 Ventilation. Where required, mechanical exhaust ventilation shall be maintained in accordance with the applicable building code.

#### 13VAC5-51-147.5. IFC Chapter 55 Cryogenic Fluids.

A. Change Sections 5501.1 and 5501.2 to read:

5501.1 Scope. Maintenance and operational aspects of the storage, use and handling of cryogenic fluids shall comply with this chapter and NFPA 55. Cryogenic fluids classified as hazardous materials shall also comply with the general requirements of Chapter 50. Partially full containers containing residual cryogenic fluids shall be considered as full for the purposes of the controls required.

#### Exceptions:

- 1. Fluids used as refrigerants in refrigeration systems (see Section 606).
- 2. Liquefied natural gas (LNG), which shall comply with NFPA 59A.

Oxidizing cryogenic fluids, including oxygen, shall comply with Chapter 63, as applicable.

Flammable cryogenic fluids, including hydrogen, methane and carbon monoxide, shall comply with Chapters 23 and 58, as applicable.

Inert cryogenic fluids, including argon, helium and nitrogen, shall comply with ANSI/CGA P-18.

5501.2 Permits. Permits shall be required as set forth in Section 107.2.

- B. Change Section 5503.1.2 to read:
- (N)5503.1.2 5503.1.2 Concrete containers. Barrier materials and membranes used in connection with concrete, but not functioning structurally, shall be compatible with the materials contained.
- C. Change Sections 5503.5.2 and 5503.6 to read:
- (N)5503.5.2 5503.5.2 Securing of containers. Stationary containers shall be secured to foundations in accordance with the applicable building code. Portable containers subject to shifting or upset shall be secured. Nesting shall be an acceptable means of securing containers.
- (N)5503.6 5503.6 Electrical wiring and equipment. Electrical wiring and equipment shall be maintained in accordance with the applicable building code.
- D. Change Section 5504.2.1 to read:
- (N)5504.2.1 5504.2.1 Stationary containers. Stationary containers shall be maintained in accordance with the applicable building code.
- E. Delete Section 5504.2.1.2.
- F. Change Sections 5504.2.1.3, 5504.2.2.2, and 5504.2.2.3 to read:
  - (N)5504.2.1.3 5504.2.1.3 Ventilation. Ventilation required in storage areas for stationary containers shall be maintained in accordance with the applicable building code.
  - (N)5504.2.2.2 5504.2.2.2 Construction of indoor areas. Rooms or areas used for the storage of cryogenic fluids in portable containers shall be maintained in accordance with the applicable building code.
  - (N)5504.2.2.3 5504.2.2.3 Ventilation. Ventilation shall be maintained in accordance with the applicable building code.
- G. Change Sections 5505.4.1 and 5505.4.1.1 to read:
- (N)5505.4.1 5505.4.1 Dispensing areas. Dispensing of cryogenic fluids with physical or health hazards shall be conducted in approved locations.
- (N)5505.4.1.1 5505.4.1.1 Ventilation. Ventilation required in areas where cryogenic fluids are dispensed shall be maintained in accordance with the applicable building code.
- Exception: Cryogenic fluids that can be demonstrated not to create harmful vapors.

## 13VAC5-51-150. IFC Chapter 56 Explosives and Fireworks.

- A. Change exception 4 in Section 5601.1 to read:
- 4. The possession, storage, and use of not more than 15 pounds (6.81 kg) of commercially manufactured sporting black powder, 20 pounds (9 kg) of smokeless powder and any amount of small arms primers for hand loading of small arms ammunition for personal consumption.
- B. Add exceptions 10, 11 and 12 to Section 5601.1 to read:
- 10. The storage, handling, or use of explosives or blasting agents pursuant to the provisions of Title 45.1 of the Code of Virginia.
- 11. The display of small arms primers in Group M when in the original manufacturer's packaging.
- 12. The possession, storage and use of not more than 50 pounds (23 kg) of commercially manufactured sporting black powder, 100 pounds (45 kg) of smokeless powder, and small arms primers for hand loading of small arms ammunition for personal consumption in Group R-3 or R-5, or 200 pounds (91 kg) of smokeless powder when stored in the manufacturer's original containers in detached Group U structures at least 10 feet (3048 mm) from inhabited buildings and are accessory to Group R-3 or R-5.
- C. Change exception 4 in Section 5601.1.3 to read:
- 4. The possession, storage, sale, handling and use of permissible fireworks where allowed by applicable local or state laws, ordinances and regulations provided such fireworks comply with CPSC 16 CFR, Parts 1500-1507, and DOTn 49 CFR, Parts 100-178, for consumer fireworks.
- D. Add exception 5 to Section 5601.1.3 to read:
- 5. The sale or use of materials or equipment when such materials or equipment is used or to be used by any person for signaling or other emergency use in the operation of any boat, railroad train or other vehicle for the transportation of persons or property.
- E. Change entire Section 5601.2 to read:
- 5601.2 Permit required. Permits shall be required as set forth in Section 107.2 and regulated in accordance with this section. The manufacture, storage, possession, sale and use of fireworks or explosives shall not take place without first applying for and obtaining a permit.
- 5601.2.1 Residential uses. No person shall keep or store, nor shall any permit be issued to keep, possess or store, any fireworks or explosives at any place of habitation, or within 100 feet (30,480 mm) thereof.

Exception: Storage of smokeless propellant, black powder, and small arms primers for personal use and not for resale in accordance with Section 5606.

5601.2.2 Sale and retail display. Except for the Armed Forces of the United States, Coast Guard, National Guard, federal, state and local regulatory, law enforcement and fire agencies acting in their official capacities, explosives shall not be sold, given, delivered or transferred to any person or company not in possession of a valid permit. The holder of a permit to sell explosives shall make a record of all transactions involving explosives in conformance with Section 5603.2 and include the signature of any receiver of the explosives. No person shall construct a retail display nor offer for sale explosives, explosive materials, or fireworks upon highways, sidewalks, public property, or in assembly or educational occupancies.

5601.2.3 Permit restrictions. The fire official is authorized to limit the quantity of explosives, explosive materials, or fireworks permitted at a given location. No person, possessing a permit for storage of explosives at any place, shall keep or store an amount greater than authorized in such permit. Only the kind of explosive specified in such a permit shall be kept or stored.

5601.2.3.1 Permit applicants. As a condition of a permit as provided for in Section 107.5, the fire official shall not issue a permit to manufacture, store, handle, use or sell explosives or blasting agents to any applicant who has not provided on the permit application the name and signature of a designated individual as representing the applicant. When, as provided for in Section 107.2 or 107.6, a permit is required to conduct a fireworks display, as a condition of permit as provided for in Section 107.5, the fire official shall not issue a permit to design, setup or conduct a fireworks display to any applicant who has not provided on the permit application the name and signature of a designated individual as representing the applicant.

If the applicant's designated individual changes or becomes no longer qualified to represent the applicant as responsible management or designated individual, the applicant shall notify the fire official who issued the permit on the change of status of the designated individual. The notice is to be made prior to the use of any explosives or conducting a fireworks display but in no case shall the notification occur more than seven days after the change of status and shall provide the name of another designated individual. The fire official may revoke or require the reissuance of a permit based on a change of permit conditions or status or inability to provide another designated individual.

5601.2.3.1.1 BCC. The SFMO shall process all applications for a BCC for compliance with § 27-97.2 of the Code of Virginia and will be the sole provider of a BCC. Using forms provided by the SFMO, a BCC may be applied for and issued to any person who submits to the

completion of a background investigation by providing fingerprints and personal descriptive information to the SFMO. The SFMO shall forward the fingerprints and personal descriptive information to the Central Criminal Records Exchange for submission to the Federal Bureau of Investigation for the purpose of obtaining a national criminal history records check regarding such applicant.

5601.2.3.1.2 Issuance of a BCC. The issuance of a BCC shall be denied if the applicant or designated person representing an applicant has been convicted of any felony, whether such conviction occurred under the laws of the Commonwealth, or any other state, the District of Columbia, the United States or any territory thereof, unless his civil rights have been restored by the Governor or other appropriate authority.

5601.2.3.1.3 Fee for BCC. The fee for obtaining or renewing a BCC from the SFMO shall be \$150 plus any additional fees charged by other agencies for fingerprinting and for obtaining a national criminal history record check through the Central Criminal Records Exchange to the Federal Bureau of Investigation.

5601.2.3.1.4 Revocation of a BCC. After issuance of a BCC, subsequent conviction of a felony will be grounds for immediate revocation of a BCC, whether such conviction occurred under the laws of the Commonwealth, or any other state, the District of Columbia, the United States or any territory thereof. The BCC shall be returned to the SFMO immediately. An individual may reapply for his BCC if his civil rights have been restored by the Governor or other appropriate authority.

5601.2.4 Financial responsibility. Before a permit is issued, as required by Section 5601.2, the applicant shall file with the jurisdiction a corporate surety bond in the principal sum of \$500,000 or a public liability insurance policy for the same amount, for the purpose of the payment of all damages to persons or property which arise from, or are caused by, the conduct of any act authorized by the permit upon which any judicial judgment results. The legal department of the jurisdiction may specify a greater amount when conditions at the location of use indicate a greater amount is required. Government entities shall be exempt from this bond requirement.

5601.2.4.1 Blasting. Before approval to do blasting is issued, the applicant for approval shall file a bond or submit a certificate of insurance in such form, amount, and coverage as determined by the legal department of the jurisdiction to be adequate in each case to indemnify the jurisdiction against any and all damages arising from permitted blasting but in no case shall the value of the coverage be less than \$1,000,000.

Exception: Filing a bond or submitting a certificate of liability insurance is not required for blasting on real estate

parcels of five or more acres conforming to the definition of "real estate devoted to agricultural use" or "real estate devoted to horticultural use" in § 58.1-3230 of the Code of Virginia and conducted by the owner of such real estate.

5601.2.4.2 Fireworks display. The permit holder shall furnish a bond or certificate of insurance in an amount deemed adequate by the legal department of the jurisdiction for the payment of all potential damages to a person or persons or to property by reason of the permitted display, and arising from any acts of the permit holder, the agent, employees or subcontractors, but in no case shall the value of the coverage be less than \$1,000,000.

#### F. Change entire Section 5601.4 to read:

5601.4 Qualifications. Persons in charge of magazines, blasting, fireworks display, or pyrotechnic special effect operations shall not be under the influence of alcohol or drugs which impair sensory or motor skills, shall be at least 21 years of age and possess knowledge of all safety precautions related to the storage, handling or use of explosives, explosive materials or fireworks.

5601.4.1 Certification of blasters and pyrotechnicians. Certificates as a restricted blaster, unrestricted blaster or pyrotechnician will be issued upon proof of successful completion of an examination approved by the SFMO commensurate to the certification sought and completion of a background investigation for compliance with § 27-97.2 of the Code of Virginia. The applicant for certification shall submit proof to the SFMO of the following experience:

- 1. For certification as a restricted blaster, at least one year under direct supervision by a certified unrestricted blaster, certified restricted blaster or other person(s) persons approved by the SFMO.
- 2. For certification as an unrestricted blaster, at least one year under direct supervision by a certified unrestricted blaster or other person or persons approved by the SFMO.
- 3. For certification as a pyrotechnician, aerial, or pyrotechnician, proximate, applicant was in responsible charge of or has assisted in the documented design, setup and conducting of a fireworks display on at least six occasions within the 24 months immediately preceding the application for certification.

The SFMO shall process all certification applicants for compliance with § 27-97.2 of the Code of Virginia and will be the sole provider of blaster and pyrotechnician certifications.

Exception: The use of explosives by the owner of real estate parcels of five or more acres conforming to the definition of "real estate devoted to agricultural use" or

"real estate devoted to horticultural use" in § 58.1-3230 of the Code of Virginia when blasting on such real estate.

5601.4.2 Certification issuance. The issuance of a certification as a blaster or pyrotechnician shall be denied if the applicant has (i) been convicted of any felony, whether such conviction occurred under the laws of the Commonwealth, or any other state, the District of Columbia, the United States or any territory thereof, unless his civil rights have been restored by the Governor or other appropriate authority, (ii) has not provided acceptable proof or evidence of the experience required in Section 5601.4.1, or (iii) has not provided acceptable proof or evidence of the continued training or education required in Section 5601.4.5.

5601.4.3 Fee for certification. The fee for obtaining or renewing a blaster or pyrotechnician certificate from the SFMO shall be \$150 plus any additional fees charged by other agencies for fingerprinting and for obtaining a national criminal history record check through the Central Criminal Records Exchange to the Federal Bureau of Investigation.

5601.4.3.1 Fee for replacement certificate. A written request for a replacement blaster or pyrotechnician certificate shall be accompanied by the payment of an administrative fee in the amount of \$20 made payable to the Treasurer of Virginia. Verbal requests shall not be accepted.

5601.4.4 Revocation of a blaster or pyrotechnician certification. After issuance of a blaster or pyrotechnician certification, subsequent conviction of a felony will be grounds for immediate revocation of a blaster or pyrotechnician certification, whether such conviction occurred under the laws of the Commonwealth, or any other state, the District of Columbia, the United States or any territory thereof. The certification shall be returned to the SFMO immediately. An individual may subsequently reapply for his blaster or pyrotechnician certification if his civil rights have been restored by the Governor or other appropriate authority.

5601.4.5 Expiration and renewal of a BCC, or blaster or pyrotechnician certification. A certificate for an unrestricted blaster, restricted blaster or pyrotechnician shall be valid for three years from the date of issuance. A BCC shall be valid for three years from the date of issuance. Renewal of the unrestricted blaster certificate will be issued upon proof of at least 16 accumulated hours of continued training or education in the use of explosives within three consecutive years and a background investigation for compliance with § 27-97.2 of the Code of Virginia. Renewal of the restricted blaster certificate will be issued upon proof of at least eight accumulated hours of continued training or education in the use of explosives within three consecutive years and a background

investigation for compliance with § 27-97.2 of the Code of Virginia. Renewal of the pyrotechnician certificate will be issued upon proof of at least 12 accumulated hours of continued training or education in the subject areas of explosives storage; the design, setup or conduct of a fireworks display within three consecutive years; and a background investigation for compliance with § 27-97.2 of the Code of Virginia. The continued training or education required for renewal of a blaster or pyrotechnician certificate shall be obtained during the three years immediately prior to the certificate's published expiration date. Failure to renew a blaster or pyrotechnician certificate in accordance with this section shall cause an individual to obtain another blaster or pyrotechnician certificate upon compliance with Section 5601.4.1 to continue engaging in the unsupervised use of explosives or conducting a fireworks display.

5601.4.6 Denial, suspension or revocation of a certificate. If issuance or renewal of a blaster or pyrotechnician certificate is denied, or upon the filing of a complaint against an applicant or certificate holder for non-performance, or performance in violation of the SFPC and the appropriate referenced NFPA 495, 1123 or 1126 standards, the State Fire Marshal may convene a three-member panel to hear the particulars of the complaint or denial. The three-member panel will be comprised of the following persons:

- 1. A Virginia certified fire official, excluding any person certified as a blaster or pyrotechnician, or who is on the staff of the SFMO.
- 2. A Virginia certified blaster or pyrotechnician whose certification is the same as that of the person to whom a complaint is lodged, and who is not associated in any way with the person against whom a complaint is lodged and whose work or employer is geographically remote, as much as practically possible, from the person to whom a complaint is lodged.
- 3. A member of the general public who does not have a vested financial interest in conducting a fireworks display, or the manufacture, sale, storage, or use of explosives.

Upon the State Fire Marshal convening such panel, the hearing is to commence within 60 calendar days of the filing of the complaint or denial. The three-member panel is to hear the complaint and render a written recommendation to the State Fire Marshal for certificate issuance, no action, revocation, or suspension of a certificate for a period not to exceed six months. Notwithstanding the discretionary decision and action to convene such panel, the State Fire Marshal reserves the authority to choose an action that may be contrary to the panel's recommendation. A written decision of the State Fire Marshal is to be delivered to the party within 14 days

of the hearing's conclusion. If the certificate is denied, revoked, or suspended by the SFMO, in accordance with Section 112.9, the party may file an appeal with the State Review Board. The party's appeal to State Review Board must be filed within 14 calendar days of the receipt of the State Fire Marshal's written decision to deny, revoke, or suspend. The denial, revocation, or suspension of a license is independent of any criminal proceedings that may be initiated by any state or local authority.

5601.4.6.1 Replacement of revoked certificate. Any person whose certificate as a pyrotechnician or blaster was revoked upon cause may apply for certification as a pyrotechnician or blaster six months or more from the date of the revocation and upon compliance with Section 5601.4.1. All elements of Section 5601.4.1 are required to be obtained and dated after the date of revocation.

5601.4.6.2 Return of suspended certificate. Any certificate that was suspended upon cause will be reinstated at the end of the suspension period without change to its expiration date.

#### G. Change Section 5601.7 to read:

5601.7 Seizure. The fire official is authorized to remove or cause to be removed or disposed of in an approved manner, at the expense of the owner, fireworks offered or exposed for sale, stored, possessed or used in violation of this chapter.

#### H. Change Section 5601.8.1.1 to read:

5601.8.1.1 Mass-detonating explosives (Division 1.1, 1.2 or 1.5). The total net explosive weight of mass-detonating explosives (Division 1.1, 1.2 or 1.5) shall be used. See Table 5604.5.2(1) as appropriate.

Exception: Where the TNT equivalence of the explosive material has been determined, the equivalence is allowed to be used to establish the net explosive weight.

#### I. Change Section 5601.8.1.3 to read:

5601.8.1.3 Combinations of mass-detonating and non-mass-detonating explosives (excluding Division 1.4). Combination of mass-detonating and non-mass-detonating explosives (excluding Division 1.4) shall be as follows:

1. Where Divisions 1.1 and 1.2 explosives are located in the same site, determine the distance for the total quantity considered first as Division 1.1 and then as Division 1.2. The required distance is the greater of the two. Where the Division 1.1 requirements are controlling and the TNT equivalence of the Division 1.2 is known, the TNT equivalent weight of the Division 1.2 items shall be allowed to be added to the total explosive weight of Division 1.1 items to determine the net explosive weight for Division 1.1 distance determination. See Table 5604.5.2(2) as appropriate.

- 2. Where Divisions 1.1 and 1.3 explosives are located in the same site, determine the distances for the total quantity considered first as Division 1.1 and then as Division 1.3. The required distance is the greater of the two. Where the Division 1.1 requirements are controlling and the TNT equivalence of the Division 1.3 is known, the TNT equivalent weight of the Division 1.3 items shall be allowed to be added to the total explosive weight of Division 1.1 items to determine the net explosive weight for Division 1.1 distance determination. See Table 5604.5.2(1) or Table 5604.5.2(2) as appropriate.
- 3. Where Divisions 1.1, 1.2 and 1.3 explosives are located in the same site, determine the distances for the total quantity considered first as Division 1.1, next as Division 1.2 and finally as Division 1.3. The required distance is the greatest of the three. As allowed by subdivisions 1 and 2 of this subsection, TNT equivalent weights for Division 1.2 and Division 1.3 items are allowed to be used to determine the net weight of explosives for Division 1.1 distance determination. Table 5604.5.2(1) shall be used where TNT equivalency is used to establish the net explosive weight.
- 4. For composite pyrotechnic items Division 1.1 and Division 1.3, the sum of the net weights of the pyrotechnic composition and the explosives involved shall be used. See Tables 5604.5.2(1) and 5604.5.2(2).

#### J. Change Section 5605.6.4.1 to read:

5605.6.4.1 Magazines. Magazines used for storage in processing areas shall be in accordance with the requirements of Section 5604.5.1. Explosive materials shall be removed to appropriate storage magazines for unattended storage at the end of the work day. The contents of indoor magazines shall be added to the quantity of explosives contained at individual workstations and the total quantity of material stored, processed or used shall be utilized to establish the intraplant separation distances indicated by Table 5604.5.2(3) as appropriate.

#### K. Change Section 5606.5.2.1 to read:

- 5606.5.2.1 Smokeless propellant. Commercial stocks of smokeless propellants shall be stored as follows:
  - 1. Quantities exceeding 20 pounds (9 kg), but not exceeding 100 pounds (45 kg) shall be stored in portable wooden boxes having walls of not less than 1 inch (25 mm) nominal thickness or equivalent.
  - 2. Quantities exceeding 100 pounds (45 kg), but not exceeding 800 pounds (363 kg), shall be stored in storage cabinets having walls not less than 1 inch (25 mm) nominal thickness or equivalent. Not more than 400 pounds (182 kg) shall be stored in any one cabinet, and cabinets shall be separated by a distance of at least 25

- feet (7620 mm) or by a fire partition having a fire-resistance rating of at least 1 hour.
- 3. Storage of quantities exceeding 800 pounds (363 kg), but not exceeding 5,000 pounds (2270 kg) in a building shall comply with all of the following:
- 3.1. The storage is inaccessible to unauthorized personnel.
- 3.2. Smokeless propellant shall be stored in nonportable storage cabinets having wood walls not less than 1 inch (25 mm) nominal thickness or equivalent and having shelves with not no more than 3 feet (914 mm) of vertical separation between shelves.
- 3.3. No more than 400 pounds (182 kg) is stored in any one cabinet.
- 3.4. Cabinets shall be located against walls with at least 40 feet (12 192 mm) between cabinets.
- 3.5. The minimum required separation between cabinets may be reduced to 20 feet (6096 mm) provided that barricades twice the height of the cabinets are attached to the wall, midway between each cabinet. The barricades must extend a minimum of 10 feet (3048 mm) outward, be firmly attached to the wall and be constructed of steel not less than 1/4 inch thick (6.4 mm), 2 inch (51 mm) nominal thickness wood, brick or concrete block.
- 3.6. Smokeless propellant shall be separated from materials classified as combustible liquids, flammable liquids, flammable solids or oxidizing materials by a distance of 25 feet (7620 mm) or by a fire partition having a fire resistance rating of 1 hour.
- 3.7. The building shall be equipped throughout with an automatic sprinkler system installed in accordance with the applicable building code.
- 4. Smokeless propellants not stored in according to Item 1, 2, or 3 shall be stored in a Type 2 or 4 magazine in accordance with Section 5604 and NFPA 495.
- L. Change Section 5606.5.2.3 to read:
- 5606.5.2.3 Small arms primers. Commercial stocks of small arms primers shall be stored as follows:
  - 1. Quantities not to exceed 750,000 small arms primers stored in a building shall be arranged such that not more than 100,000 small arms primers are stored in any one pile and piles are not less than 15 feet (4572 mm) apart.
- 2. Quantities exceeding 750,000 small arms primers stored in a building shall comply with all of the following:
- 2.1. The warehouse or storage building shall not be accessible to unauthorized personnel.

- 2.2. Small arms primers shall be stored in cabinets. Not more than 200,000 small arms primers shall be stored in any one cabinet.
- 2.3. Shelves in cabinets shall have vertical separation of not less than 2 feet (610 mm).
- 2.4. Cabinets shall be located against walls of the warehouse or storage room with not less than 40 feet (12 192 mm) between cabinets. The minimum required separation between cabinets shall be allowed to be reduced to 20 feet (6096 mm) provided that barricades twice the height of the cabinets are attached to the wall, midway between each cabinet. The barricades shall be firmly attached to the wall and shall be constructed of steel not less than 1/4 inch thick (6.4 mm), 2 inch (51 mm) nominal thickness wood, brick or concrete block.
- 2.5. Small arms primers shall be separated from materials classified as combustible liquids, flammable liquids, flammable solids or oxidizing materials by a distance of 25 feet (7620 mm) by a fire partition having a fire-resistance rating of 1 hour.
- 2.6. The building shall be protected throughout with an automatic sprinkler system installed in accordance with the applicable building code.
- 3. Small arms primers not stored in accordance with Item 1 or 2 of this section shall be stored in a magazine meeting the requirements of Section 5604 and NFPA 495.
- M. J. Add the following to the list of definitions in Section 5602.1:

Background clearance card (BCC).

Blaster, restricted.

Blaster, unrestricted.

Design.

Designated individual.

Fireworks.

Fireworks, 1.4G.

Fireworks, 1.3G.

Permissible fireworks.

Pyrotechnician (fireworks operator).

Pyrotechnician, aerial.

Pyrotechnician, proximate.

Responsible management.

Smokeless propellants.

Sole proprietor.

N. K. Change Section 5603.4 to read:

5603.4 Accidents. Accidents involving the use of explosives, explosive materials, and fireworks, which result in injuries or property damage, shall be immediately reported by the permit holder to the fire code official and State Fire Marshal.

#### O. L. Change Section 5605.1 to read:

5605.1 General. The restricted and unrestricted manufacture, assembly and testing of explosives, ammunition, blasting agents and fireworks shall comply with the requirements of this section, NFPA 495, NFPA 1124, or NFPA 1126.

#### Exceptions:

- 1. The hand loading of small arms ammunition prepared for personal use and not offered for resale.
- 2. The mixing and loading of blasting agents at blasting sites in accordance with NFPA 495.

#### P. M. Add Section 5605.1.1 to read:

5605.1.1 Permits. Permits for the restricted and unrestricted explosives manufacture, assembly and testing of explosives, ammunition, blasting agents and fireworks shall be required as set forth in Section 107.2 and regulated in accordance with this section. A permit for unrestricted explosives manufacturing of any explosive material shall be prohibited unless such manufacture is authorized by a federal license and conducted in accordance with recognized safety practices. All restricted explosives manufacturing shall comply with the instructions provided by the supplier of the components used in the manufacture of the explosive material.

#### **Exceptions:**

- 1. Any recreational use of reactive targets is not required to obtain a permit for restricted explosives manufacture or explosives use when such manufacture and use complies with all of the following:
- 1.1. The manufacture and use is limited to one pound or less per unit on private property with the permission of the property owner and used no closer than 500 feet from a roadway or structure;
- 1.2. The manufacture of the reactive target complies with the instructions provided by the producer of the components used in the manufacture;
- 1.3. The reactive target manufactured is for immediate use without any residual storage or transportation; and
- 1.4. The exploding or use of the target is in conformance with its intended purpose by the manufacturer of the reactive target and does not involve the deliberate

destruction of any property, vehicle, structure or animal life.

- 2. The owner of real estate parcels of five or more acres conforming to the definition of "real estate devoted to agricultural use" or "real estate devoted to horticultural use" in § 58.1-3230 of the Code of Virginia is not required to obtain a permit for restricted explosives manufacture when such manufacture complies with all of the following:
- 2.1. The manufacture of the explosives is conducted by the owner of such real estate;
- 2.2. The manufacture of the explosives complies with the instructions provided by the producer of the components used in the manufacture;
- 2.3. The explosive used does not include reactive targets;
- 2.4. The reactive target manufactured is for immediate use without any residual storage or transportation; and
- 2.5. A permit to use explosives has been obtained in accordance with Section 107.2.
- 3. An applicant that is performing nonpersonal, business work is not required to obtain a permit for restricted explosives manufacture when such manufacture complies with all of the following:
- 3.1. The applicant's certified blaster who manufactures the explosives complies with the instructions provided by the producer of the components used in the manufacture;
- 3.2. The explosive used does not include the use of reactive targets;
- 3.3. The explosive material manufactured is for immediate use without any residual storage or transportation; and
- 3.4. A permit to use explosives has been obtained in accordance with Section 107.2.
- Q. N. Delete Section 5605.3 and Table 5605.3.
- R. O. Change Section 5605.4 to read:

(N)5605.4 5605.4 Separation of manufacturing operating buildings from inhabited buildings, public traffic routes and magazines. Where an operating building on an explosive materials plant site is designed to contain explosive materials, such a building shall be maintained in accordance with the applicable building code.

S. P. Change Section 5605.5 to read:

(N)5605.5 5605.5 Buildings and equipment. Buildings or rooms that exceed the maximum allowable quantity per control area of explosive materials shall be operated in accordance with this section.

Exception: Fireworks manufacturing buildings constructed and operated in accordance with NFPA 1124.

#### T. Delete Table 5605.3.

U. Q. Change Section 5605.6.4 to read:

(N)5605.6.4 5605.6.4 Quantity limits. The quantity of explosives at any particular work station shall be limited to that posted on the load limit signs for the individual work station. The total quantity of explosives for multiple workstations shall not exceed that established by the intraplant distances in accordance with the applicable building code.

#### R. Change Section 5605.6.4.1 to read:

5605.6.4.1 Magazines. Magazines used for storage in processing areas shall be in accordance with the requirements of Section 5604.5.1. Explosive materials shall be removed to appropriate storage magazines for unattended storage at the end of the work day. The contents of indoor magazines shall be added to the quantity of explosives contained at individual workstations and the total quantity of material stored, processed, or used shall be utilized to establish the intraplant separation distances indicated by Table 5604.5.2(3) as appropriate.

#### V. S. Change Section 5606.4 to read:

5606.4 Storage in residences. Propellants for personal use in quantities not exceeding 50 pounds (23 kg) of black powder or 100 pounds (45 kg) of smokeless powder shall be stored in original containers in occupancies limited to Groups R-3 and R-5, or 200 pounds (91 kg) of smokeless powder when stored in the manufacturer's original containers in detached Group U structures that are at least 10 feet from inhabited buildings and are accessory to Group R-3 or R-5. In other than Group R-3 or R-5, smokeless powder in quantities exceeding 20 pounds (9 kg) but not exceeding 50 pounds (23 kg) shall be kept in a wooden box or cabinet having walls of at least one inch (25 mm) nominal thickness or equivalent.

- W. T. Delete Sections 5606.4.1, 5606.4.2, and 5606.4.3.
- X. U. Change Section 5606.5.1.1 to read:

5606.5.1.1 Smokeless propellant. No more than 100 pounds (45 kg) of smokeless propellants, in containers of 8 pounds (3.6 kg) or less capacity, shall be displayed in Group M occupancies.

- <del>Y.</del> <u>V.</u> Delete Section 5606.5.1.3.
- Z. W. Change Section 5606.5.2.1 to read:

5606.5.2.1 Smokeless propellant Commercial stocks of smokeless propellants shall be stored as follows:

1. Quantities exceeding 20 pounds (9 kg), but not exceeding 100 pounds (45 kg) shall be stored in portable

wooden boxes having walls of at least one inch (25 mm) nominal thickness or equivalent.

- 2. Quantities exceeding 100 pounds (45 kg), but not exceeding 800 pounds (363 kg), shall be stored in storage cabinets having walls at least one inch (25 mm) nominal thickness or equivalent. Not more than 400 pounds (182 kg) shall be stored in any one cabinet, and cabinets shall be separated by a distance of at least 25 feet (7620 mm) or by a fire partition having a fire-resistance rating of at least one hour.
- 3. Storage of quantities exceeding 800 pounds (363 kg), but not exceeding 5,000 pounds (2270 kg) in a building shall comply with all of the following:
  - 3.1. The storage is inaccessible to unauthorized personnel.
  - 3.2. Smokeless propellant shall be stored in nonportable storage cabinets having wood walls at least one inch (25 mm) nominal thickness or equivalent and having shelves with no more than three feet (914 mm) of vertical separation between shelves.
  - 3.3. No more than 400 pounds (182 kg) is stored in any one cabinet.
  - 3.4. Cabinets shall be located against walls with at least 40 feet (12–192 (12,192 mm) between cabinets. The minimum required separation between cabinets may be reduced to 20 feet (6096 mm) provided that barricades twice the height of the cabinets are attached to the wall, midway between each cabinet. The barricades must extend a minimum of 10 feet (3048 mm) outward, be firmly attached to the wall, and be constructed of steel not less than 0.25 inch thick (6.4 mm), two inch 2-inch (51 mm) nominal thickness wood, brick, or concrete block.
  - 3.5. Smokeless propellant shall be separated from materials classified as combustible liquids, flammable liquids, flammable solids, or oxidizing materials by a distance of 25 feet (7620 mm) or by a fire partition having a fire-resistance rating of one hour.
  - 3.6. The building shall be equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 the applicable NFPA 13 standard.
- 4. Smokeless propellants not stored according to Item 1, 2, or 3 above shall be stored in a Type 2 or 4 magazine in accordance with Section 5604 and NFPA 495.

#### X. Change Section 5606.5.2.3 to read:

- 5606.5.2.3 Small arms primers. Commercial stocks of small arms primers shall be stored as follows:
  - 1. Quantities not to exceed 750,000 small arms primers stored in a building shall be arranged such that not more

- than 100,000 small arms primers are stored in any one pile, and piles are not less than 15 feet (4572 mm) apart.
- <u>2. Quantities exceeding 750,000 small arms primers stored in a building shall comply with all of the following:</u>
- 2.1. The warehouse or storage building is not open to unauthorized personnel.
- 2.2. Small arms primers shall be stored in cabinets. Not more than 200,000 small arms primers shall be stored in any one cabinet.
- 2.3. Shelves in cabinets shall have vertical separation of not less than 2 feet (610 mm).
- 2.4. Cabinets shall be located against walls of the warehouse or storage room with not less than 40 feet (12,192 mm) between cabinets. The minimum required separation between cabinets shall be allowed to be reduced to 20 feet (6096 mm) provided that barricades twice the height of the cabinets are attached to the wall, midway between each cabinet. The barricades shall be firmly attached to the wall and shall be constructed of steel not less than 1/4-inch thick (6.4 mm), 2-inch (51 mm) nominal thickness wood, brick, or concrete block.
- 2.5. Small arms primers shall be separated from materials classified as combustible liquids, flammable liquids, flammable solids, or oxidizing materials by a distance of 25 feet (7620 mm) by a fire partition having a fire-resistance rating of one hour.
- 2.6. The building shall be protected throughout with an automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.
- 3. Small arms primers not stored in accordance with Item 1 or 2 of this section shall be stored in a magazine meeting the requirements of Section 5604 and NFPA 495.

#### AA. Y. Change Section 5607.1 to read:

5607.1 General. Blasting operations shall be conducted only by persons certified by the SFMO as a restricted or unrestricted blaster or shall be supervised on-site by a person properly certified by the SFMO as a restricted or unrestricted blaster.

#### BB. Z. Add Section 5607.16 to read:

5607.16 Blast records. A record of each blast shall be kept and retained for at least five years and shall be readily available for inspection by the code official. The record shall be in a format selected by the blaster and shall contain the minimum data and information indicated in Form 5607.16.

#### Form 5607.16 Blast (shot) Record

Block 1 General Information								
1	Blast date:	Blast Number:	Blast Time:		Permit Number:			
2	Blast location by address including city, county or town:							
3	Blast location by GPS coordinates:   check box if unknown							
4	Name of Permit Holder:							
5	Name of Blaster in charge (pr	rint):						
6	Signature of Blaster in charge	e:						
7	Certification Number of Blast	ter in charge:						
		Bloc General Environn						
1	Weather (Clear? Cloudy?	Wind direction and spe	eed	Temperatu	Temperature			
	Overcast?)	@m	@mph		F° / C°			
2	Topography (Flat? Hilly? Mountainous?)	Distance from blast site	e to nearest inhabited	Distance from nearest inhabited building determined by:				
	Wountamous?)	building.	building:		□ GPS coordinates □ Measurement □ Estimated			
3	Use of nearest inhabited buildi (Dwelling? Business? Apartme Building? School?)		Direction from blast site to nearest inhabited building:		from blast site to nearest building determined by: crument s			
Additional Blaster notations on environmental conditions:								
Block 3 Shot Layout and Precautions Taken $(N/A = Not Applicable)$								
1	Number of holes	Diameter of hole o	Diameter of hole or holes		Depth of hole or holes			
2	Were any holes decked?	-			How many decks per hole?			
	□ Yes	□ N/A	□ N/A		□ N/A			
	□ No		(If applicable, indicate on any attached shot pattern drawing which holes were decked and the number of decks for the holes.)					

3	Shot pattern		Depth of sub-drilling		Drilling angle			
	☐ Check this box if only single hole.							
4	Burden		Spacing of holes		Water height			
5	Stemming height		Material used for st	emming	Chec	k box for flyrock precautions taken		
Addit	ional Blaster notations on shot	layout and p	recautions:					
				□ Mats				
					□ Overburden			
						□ None taken		
		Seisi	Block mic Control Measures		ole)			
1	Was scaled distance Indicate which scaled distance formula used?			e equation was used. $\Box$ N/A		Maximum allowable charge weight per 8 ms based on scaled		
	□ Yes	WALL OF	D(6) (50) 2			distance. $\square$ N/A		
	□ No	□ W(lb)={	D(ft)/50} <sup>2</sup>					
		□ W(lb)={	$D(ft)/55$ } <sup>2</sup>					
			,					
		$\square \text{ W(lb)=}\{\text{D(ft)/65}\}^2$						
2	Was seismograph used?	_	ph manufacturer and i	model		Seismograph serial number:		
	□ Yes	number: □ N/A				□ <b>N</b> /A		
	□ No				Seismograph's last calibration			
						date. □ N/A		
3	Distance and direction seismograph from blast			Distance determined by:				
	site □ N/A			□ N/A □	GPS co	oordinates		
				□ Estimated □ Measurement				
4	Seismograph   N	/A		Seismograph recordings: □ N/A				
	Geophone Minimum Freque	ncy	Hz	Transversein/s Hz				
	Seismograph			Verticalin/s Hz				
	Microphone Minimum Frequ	uency	_Hz	Longitudinalin/s Hz				
5	Seismograph trigger level	□ N/A		AcousticdB Hz				
	in/sdB							
Addit	ional Blaster notations on seisi							
			Block					
			Quantity an					
1	Maximum allowable charge weight per 8 ms interval			Initiation (Check)				
	□ Delay not used			Flactric				
	lbs			□ Electric □ Non-electric				
2	Maximum number of holes/o	as interval						
	□ Delay not used		□ Electronic					
	lbs							

3	Maximum weight or stick	s of explosive per hole	Firing device manufacturer and model:					
	lbs							
	Explosive Product listing (Attach additional pages as needed.)							
4	Manufacturer	Product name, description or bra	and	Number of units	Unit weight (lb)			
5 Total explosive weight in this shot: lbs.								
Additional Blaster notations on product and quantities:								
Block 6 Completion of Shot Record and General Comments								
General comments on shot not included in notes above:								
Date	shot report completed:		Time shot report completed:					
Printed name and signature of person completing shot report if different from Block 1, Lines 5 and 6.			(Print)					
·			(Signature)					

#### CC. AA. Change Section 5608.2 to read:

5608.2 Permit application. Prior to issuing permits for a fireworks display, plans for the fireworks display, inspections of the display site and demonstrations of the display operations shall be approved. A plan establishing procedures to follow and actions to be taken in the event that a shell fails to ignite in, or discharge from, a mortar or fails to function over the fallout area or other malfunctions shall be provided to the fire code official.

In addition to the requirements of Section 5601.2.3.1, a permit to conduct a fireworks display shall not be issued to any applicant without the applicant identifying on the application the pyrotechnician who will be in responsible charge of the fireworks display and who is appropriately certified as a pyrotechnician in accordance with Section 5601.4.1.

Exception: Permits are not required for the use or display of permissible fireworks on private property with the consent of the owner of such property.

#### DD. BB. Change Section 5608.3 to read:

5608.3 Approved fireworks displays. Approved fireworks displays shall include only the approved fireworks 1.3G,

fireworks 1.4G, fireworks 1.4S and pyrotechnic articles 1.4G. The design, setup, conducting or direct on-site supervision of the design, setup and conducting of any fireworks display, either inside a building or outdoors, shall be performed only by persons certified by the SFMO in accordance with Section 5601.4.1 as a pyrotechnician (firework operator) and at least one person properly certified by the SFMO as a pyrotechnician shall be present at the site where the fireworks display is being conducted. The approved fireworks shall be arranged, located, discharged and fired in a manner that will not pose a hazard to property or endanger any person.

Exception: Certification as a pyrotechnician is not required for the use or display of permissible fireworks when conducted on private property with the consent of the owner of such property.

#### EE. CC. Change Section 5608.4 to read:

5608.4 Clearance. Spectators, spectator parking areas, and dwellings, buildings or structures shall not be located within the display site. The site for the outdoor land or water display shall have at least 100-ft/in. (31-m/2.4mm) radius of internal mortar diameter of the largest shell to be fired as shown in Table 5608.4.

#### **Exceptions:**

- 1. This provision shall not apply to pyrotechnic special effects and fireworks displays using Division 1.4G materials before a proximate audience in accordance with NFPA 1126.
- 2. This provision shall not apply to unoccupied dwellings, buildings and structures with the approval of the building owner and the fire code official.

FF. DD. Add Table 5608.4 to read:

Table 5608.4
Distances for Outdoor Fireworks Display Sites: Minimum Separation Distances from Mortars to Spectators for Land and Water Displays

Water Displays									
Mortar Size <sup>a</sup>		Minimum Secured Diameter of Site		Vertical Mortars <sup>b</sup>		Angled Mortars <sup>c</sup> 1/3 offset		Mortars to Special Hazards <sup>d</sup>	
in.	mm	ft	m	ft	m	ft	m	ft	m
<3	<76	300	92	150	46	100	31	300	92
3	76	600	183	300	92	200	61	600	183
4	102	800	244	400	122	266	81	800	244
5	127	1000	305	500	152	334	102	1000	305
6	152	1200	366	600	183	400	122	1200	366
7	178	1400	427	700	213	467	142	1400	427
8	203	1600	488	800	244	534	163	1600	488
10	254	2000	610	1000	305	667	203	2000	610
12	305	2400	732	1200	366	800	244	2400	732
>12	Requires the approval of the fire official								

<sup>&</sup>lt;sup>a</sup> Aerial shells, mines, and comets shall be classified and described only in terms of the inside diameter of the mortar from which they are fired (e.g., 3-in. (76-mm) aerial shells, mines and comets are only for use in 3-in. (76-mm) mortars).

GG. EE. Add Sections 5608.4.1 and 5608.4.2 to read:

5608.4.1 Non-splitting, non-bursting comets, and mines. For non-splitting or non-bursting comets and mines containing only stars or non-splitting or non-bursting comets, the minimum required radius of the display site shall be 50 feet per inch (15.24 m per 25.4 mm) of the internal mortar diameter of the largest comet or mine to be fired, one-half that shown in Table 5608.4.

5608.4.2 Special distance requirements. The minimum distance requirements of Table 5608.4 shall be adjusted as follows:

1. For chain-fused aerial shells and comets and mines to be fired from mortars, racks, or other holders that are sufficiently strong to prevent their being repositioned in the event of an explosive malfunction of the aerial shells, comets, or mines, the minimum required radius shall be the same as that required in Sections 5608.4 and 5608.4.1. For chain-fused aerial shells and comets and mines to be fired from mortars, racks, or other holders that are not sufficiently strong to prevent their being repositioned in the event of an explosive malfunction of the aerial shells, comets, or mines, or if there is doubt concerning the strength of racks holding chain-fused mortars, based upon the largest mortar in the sequence, the minimum required radius shall be double that required in Sections 5608.4 and 5608.4.1.

2. Distances from the point of discharge of any firework to a health care or detention and correctional facility, or the bulk storage of materials that have flammability,

<sup>&</sup>lt;sup>b</sup> Where the mortars are positioned vertically, the mortars shall be placed at the approximate center of the display site.

<sup>&</sup>lt;sup>c</sup> Mortars shall be permitted to be angled during a display to allow for wind and to carry shells away from the main spectator viewing areas. For angled mortars, the minimum secured diameter of the display site does not change. Only the location of the mortars within the secured area changes when the mortars are angled.

<sup>&</sup>lt;sup>d</sup> Note that this is only the distance to the special hazards. The minimum secured diameter of the display site does not change.

explosive, or toxic hazard shall be at least twice the distances specified in Table 5608.4.

- 3. The minimum required spectator separation distance for roman candles and cakes that produce aerial shells, comets, or mine effects shall be the same as the minimum required radius specified in Table 5608.4.
- 4. Aerial shells, comets and mines, and roman candles and cakes shall be permitted to be angled if the dud shells or components are carried away from the main spectator area and either of the following requirements is satisfied:
- 4.1. The offset specified in Table 5608.4 is followed.
- 4.2. The separation distance is correspondingly increased in the direction of the angle.

If the offset provided in Table 5608.4 is followed, the mortars or tubes shall be angled so that any dud shells or components fall at a point approximately equal to the offset of the mortars or tubes from the otherwise required discharge point but in the opposite direction.

# 13VAC5-51-151. IFC Chapter 57 Flammable and Combustible Liquids.

A. The following changes shall be made to Section 5701, General:

1. Add Section 5701.1.1 to read:

5701.1.1 Other regulations. Provisions of the Virginia State Water Control Board regulations 9VAC25-91 and 9VAC25-580 addressing the maintenance and operational aspects of underground and aboveground storage tanks subject to those regulations are hereby incorporated by reference to be an enforceable part of this code. Where differences occur between the provisions of this code and the incorporated provisions of the State Water Control Board regulations, the provisions of the State Water Control Board regulations shall apply.

Note: For requirements for the installation, repair, upgrade and closure of such tanks, see Section 414.6.2 of the USBC, Part I, Construction.

2. Change Section 5701.2 to read:

(N)5701.2 5701.2 Applicability. This chapter shall apply to the maintenance and operation of flammable and combustible liquids.

- 3. Delete Section 5701.3.
- 4. Change Section 5701.4 to read:

5701.4 Permits. Permits shall be required as set forth in Section 107.2.

B. The following changes shall be made to Section 5703, General Requirements:

1. Change Sections 5703.1 and 5703.1.1 to read:

(N)5703.1 5703.1 Electrical. Electrical wiring and equipment shall be maintained in accordance with the applicable building code.

(N)5703.1.1 5703.1.1 Classified locations for flammable liquids. Areas where flammable liquids are stored, handled, dispensed or mixed shall be maintained in accordance with the applicable building code.

- 2. Delete Table 5703.1.1.
- 3. Change Section 5703.1.2 to read:

(N)5702.1.2 5702.1.2 Classified locations for combustible liquids. Areas where Class II or III liquids are heated above their flash points shall be maintained in accordance with the applicable building code.

- 4. Delete Section 5703.1.3.
- 5. Change Sections 5703.2 and 5703.6 to read:

(N)5703.2 5703.2 Fire protection. Where provided, fire protection for the storage, use, dispensing, mixing, handling, and onsite transportation of flammable and combustible liquids shall be maintained in accordance with the applicable building code.

(N)5703.6 5703.6 Piping systems. Piping systems, and their component parts, for flammable and combustible liquids shall be maintained in accordance with the applicable building code.

- 6. Delete Sections 5703.6.1 and 5703.6.2.
- 7. Delete Table 5703.6.2.
- 8. Delete Sections 5703.6.2.1 and 5703.6.3.
- 9. Change Section 5703.6.3.1 to read:

(N)5703.6.3.1 5703.6.3.1 Existing piping. Existing piping shall be tested in accordance with the applicable building code where the fire official has reasonable cause to believe that a leak exists.

- 10. Delete Sections 5703.6.4 through 5703.6.11.
- C. The following changes shall be made to Section 5704, Storage:
  - 1. Delete Section 5704.2.5.
  - 2. Delete Sections 5704.2.7 through 5704.2.7.3.5.3.
  - 3. Change Section 5704.2.7.4 to read:

(N)5704.2.7.4 5704.2.7.4 Emergency venting. Where required, emergency venting for stationary, aboveground tanks shall be maintained in accordance with the applicable building code.

4. Delete Sections 5704.2.7.5 and 5704.2.7.5.1.

- 5. Delete Section 5704.2.7.5.3.
- 6. Delete Sections 5704.2.7.5.5 through 5704.2.7.5.5.2.
- 7. Delete Sections 5704.2.7.5.7 and 5704.2.7.5.8.
- 8. Change Section 5704.2.7.6 to read:

(N)5704.2.7.6 5704.2.7.6 Repair, alteration or reconstruction of tanks and piping. Hot work, as defined in Section 202, on storage tanks shall be conducted in accordance with Section 3510.

- 9. Delete Sections 5704.2.7.7 through 5704.2.7.9.
- 10. Delete Sections 5704.2.7.11 through 5704.2.8.3.
- 11. Change Section 5704.2.8.5 to read:

(N)5704.2.8.5 5704.2.8.5 Anchoring. Anchoring for vaults shall be maintained in accordance with the applicable building code.

- 12. Delete Sections 5704.2.8.7 and 5704.2.8.8.
- 13. Change Section 5704.2.8.9 to read:

(N)5704.2.8.9 5704.2.8.9 Ventilation. Where required, the exhaust system shall be maintained in accordance with the applicable building code.

- 14. Delete Sections 5704.2.8.10 and 5704.2.8.11.
- 15. Delete Sections 5704.2.8.13 and 5704.2.8.14.
- 16. Delete Section 5704.2.8.16.
- 17. Delete Section 5704.2.8.18.
- 18. Change Sections 5704.2.9 and 5704.2.9.1 to read:

(N)5704.2.9 5704.2.9 Aboveground tanks. Aboveground storage of flammable and combustible liquids in tanks shall be maintained in accordance with the applicable building code.

(N)5704.2.9.1 5704.2.9.1 Existing noncompliant installations. Existing aboveground tanks shall be maintained in accordance with the code requirements that were applicable at the time of installation.

- 19. Delete Sections 5704.2.9.2 through 5704.2.9.2.3.
- 20. Delete Section 5704.2.9.3.
- 21. Change Sections 5704.2.9.4 and 5704.2.9.5 to read:

(N)5704.2.9.4 5704.2.9.4 Stairways, platforms and walkways. Stairways, platforms and walkways shall be maintained in accordance with the applicable building code.

(N)5704.2.9.5 5704.2.9.5 Aboveground tanks inside of buildings. Aboveground tanks inside of buildings shall be maintained in accordance with the applicable building code.

- 22. Delete Sections 5704.2.9.5.1 and 5704.2.9.5.2.
- 23. Change Section 5704.2.9.6 to read:

(N)5704.2.9.6 5704.2.9.6 Aboveground tanks outside of buildings. Aboveground tanks outside of buildings shall be maintained in accordance with the applicable building code.

- 24. Delete Sections 5704.2.9.6.1 through 5704.2.9.7.3.
- 25. Delete Section 5704.2.9.7.5.
- 26. Delete Sections 5704.2.9.7.5.2 and 5704.2.9.7.6.
- 27. Delete Sections 5704.2.9.7.8 through 5704.2.10.3.
- 28. Delete Section 5704.2.10.5.
- 29. Change Sections 5704.2.11 and 5704.2.11.1 to read:

(N)5704.2.11 5704.2.11 Underground tanks. Underground storage of flammable and combustible liquids in tanks shall be maintained in accordance with the applicable building code.

(N)5704.2.11.1 5704.2.11.1 Location. The location of flammable and combustible liquid storage tanks located underground, either outside or under buildings, shall be in accordance with the applicable building code.

- 30. Delete Sections 5704.2.11.2 through 5704.2.11.4.
- 31. Delete Section 5704.2.11.4.2.
- 32. Add the following exception to Section 5704.2.13.1.3 to read:

Exception: Underground storage tanks subject to the Virginia State Water Control Board regulation 9VAC25-580.

- 33. Change Section 5704.2.12.2 to read:
  - 5704.2.12.2 Testing of underground tanks. Before being covered or placed in use, tanks and piping connected to underground tanks shall be tested for tightness in the presence of the fire code official. Piping shall be tested in accordance with the applicable building code. The system shall not be covered until it has been approved.
- 34. Change Section 5704.13.1.2 to read:
  - 5704.2.13.1.2 Out of service for 90 days. Underground tanks not used for a period of 90 days shall be safeguarded in accordance with all the following or be removed in accordance with Section 5704.2.14:
  - 1. Flammable or combustible liquids shall be removed from the tank.
  - 2. All piping, including fill line, gauge opening, vapor return and pump connection, shall be capped or plugged and secured from tampering.

- 3. Vent lines shall remain open and be maintained in accordance with Section 5704.2.7.4.
- 35. Change Section 5704.2.13.1.5 to read:

(N)5704.2.13.1.5 5704.2.13.1.5 Reinstallation of underground tanks. Tanks that are to be reinstalled for flammable or combustible liquid service shall be approved by the building official.

36. Change Section 5704.3 to read:

5704.3 Container and portable tank storage. Storage of flammable and combustible liquids in closed containers that do not exceed 60 gallons (227 L) in individual capacity and portable tanks that do not exceed 660 gallons (2498 L) in individual capacity, and limited transfers incidental thereto, shall comply with Sections 5704.3.1 through 5704.3.8.4.

37. Change Section 5704.3.3.5 to read:

(N)5704.3.3.5 5704.3.3.5 Shelf storage. Shelving shall be maintained in accordance with the applicable building code.

- 38. Delete Sections 5704.3.3.5.1 and 5704.3.3.5.2.
- 39. Delete Section 5704.3.3.6.
- 40. Change Section 5704.3.4 to read:

(N)5704.3.4 5704.3.4 Quantity limits for storage. Liquid storage quantity limitations shall be maintained in accordance with the applicable building code.

- 41. Delete Section 5704.3.4.1.
- 42. Delete Table 5704.3.4.1.
- 43. Delete Sections 5704.3.4.2 and 5704.3.4.3.
- 44. Change Section 5704.3.5 to read:

(N)5704.3.5 5704.3.5 Storage in control areas. Storage of flammable and combustible liquids in control areas shall be maintained in accordance with the applicable building code.

- 45. Delete Section 5704.3.5.1.
- 46. Change Section 5704.3.6.2 to read:

5704.3.6.2 Container capacity. Containers for Class I liquids shall not exceed a capacity of 5 gallons (19 L).

Exception: Metal containers not exceeding 55 gallons (208 L) are allowed to store up to 240 gallons (908 L) of the maximum allowable quantity per control area of Classes IB and IC liquids in a control area. The building shall be equipped throughout with an approved automatic sprinkler system in accordance with the applicable building code. The containers shall be provided with plastic caps without cap seals and shall be stored upright.

Containers shall not be stacked or stored in racks and shall not be located in areas accessible to the public.

47. Change Section 5704.3.7.1 to read:

(N)5704.3.7.1 5704.3.7.1 General. Quantities of liquids exceeding those set forth in the applicable building code for storage in control areas shall be stored in a liquid storage room complying with the applicable building code.

48. Change Section 5704.3.7.2.2 to read:

(N)5704.3.7.2.2 5704.3.7.2.2 Separation and aisles. Piles shall be separated from each other in accordance with the applicable building code. Aisles shall be maintained in accordance with the applicable building code.

49. Change Sections 5704.3.7.3 through 5704.3.7.5 to read:

(N)5704.3.7.3 5704.3.7.3 Spill control and secondary containment. Liquid storage rooms shall be maintained in accordance with the applicable building code.

(N)5704.3.7.4 5704.3.7.4 Ventilation. Ventilation for storage rooms shall be maintained in accordance with the applicable building code.

(N)5704.3.7.5 5704.3.7.5 Fire protection. Fire protection for liquid storage rooms shall be maintained in accordance with the applicable building code.

- 50. Delete Section 5704.3.7.5.1.
- 51. Change Sections 5704.3.8 and 5704.3.8.1 to read:

(N)5704.3.8 5704.3.8 Liquid storage warehouses. Liquid storage warehouses shall be maintained in accordance with the applicable building code.

(N)5704.3.8.1 5704.3.8.1 Quantities and storage arrangement. The total quantities of liquids in a liquid storage warehouse shall be maintained in accordance with the applicable building code. The arrangement of storage shall be in accordance with Table 5704.3.6.3(2) or 5704.3.6.3(3).

- 52. Delete Sections 5704.3.8.1.1 and 5704.3.8.1.2.
- 53. Change Sections 5704.3.8.2 through 5704.3.8.4 to read:

(N)5704.3.8.2 5704.3.8.2 Spill control and secondary containment. Spill control and secondary containment for liquid storage warehouses shall be maintained in accordance with the applicable building code.

(N)5704.3.8.3 5704.3.8.3 Ventilation. Ventilation for liquid storage warehouses storing containers greater than 5 gallons (19 L) in capacity shall be maintained in accordance with the applicable building code.

(N)5704.3.8.4 5704.3.8.4 Automatic sprinkler systems. Automatic sprinkler systems for storage warehouses shall be maintained in accordance with the applicable building code.

- 54. Delete Section 5704.3.8.5.
- 55. Change Section 5704.4.3 to read:

(N)5704.4.3 5704.4.3 Spill control and secondary containment. Spill control and secondary containment for storage areas shall be maintained in accordance with the applicable building code.

- 56. Delete Section 5704.4.7.
- D. The following change shall be made to Section 5705, Dispensing, Use, Mixing and Handling:
  - 1. Change Section 5705.3.6.2.3 to read:

5705.3.6.2.3 Solvent quantity limits. Solvent quantities shall be limited as follows:

- 1. Machines without remote solvent reservoirs shall be limited to quantities set forth in Section 5705.3.5.
- 2. Machines with remote solvent reservoirs using Class I liquids shall be limited to quantities set forth in Section 5705.3.5.
- 3. Machines with remote solvent reservoirs using Class II liquids shall be limited to 35 gallons (132 L) per machine. The total quantities shall not exceed an aggregate of 240 gallons (908 L) per control area in buildings not equipped throughout with an approved automatic sprinkler system and an aggregate of 480 gallons (1817 L) per control area in buildings equipped throughout with an approved automatic sprinkler system in accordance with the applicable building code NFPA 13 standard.
- 4. Machines with remote solvent reservoirs using Class IIIA liquids shall be limited to 80 gallons (303 L) per machine.
- 2. Change Section 5705.5 to read:

5705.5 Alcohol-based hand rubs classified as Class I or II liquids. The use of wall-mounted dispensers containing alcohol-based hand rubs classified as Class I or II liquids shall be in accordance with all of the following:

- 1. The maximum capacity of each dispenser shall be 68 ounces (2 L).
- 2. The minimum separation between dispensers shall be 48 inches (1219 mm).
- 3. The dispensers shall not be installed above, below, or closer than 1 inch (25 mm) to an electrical receptacle, switch, appliance, device or other ignition source. The wall space between the dispenser and the floor or

- intervening countertop shall be free of electrical receptacles, switches, appliances, devices or other ignition sources.
- 4. Dispensers shall be mounted so that the bottom of the dispenser is not less than 42 inches (1067 mm) and not more than 48 inches (1219 mm) above the finished floor.
- 5. Dispensers shall not release their contents except when the dispenser is manually activated. Facilities shall be permitted to install and use automatically activated "touch free" alcohol-based hand-rub dispensing devices with the following requirements:
- 5.1. The facility or persons responsible for the dispensers shall test the dispensers each time a new refill is installed in accordance with the manufacturer's care and use instructions.
- 5.2. Dispensers shall be designed and must operate in a manner that ensures accidental or malicious activations of the dispensing device are minimized. At a minimum, all devices subject to or used in accordance with this section shall have the following safety features:
- 5.2.1. Any activations of the dispenser shall only occur when an object is placed within 4 inches (98 mm) of the sensing device.
- 5.2.2. The dispenser shall not dispense more than the amount required for hand hygiene consistent with label instructions as regulated by the U.S. Food and Drug Administration (USFDA).
- 5.2.3. An object placed within the activation zone and left in place will cause only one activation.
- 6. Storage and use of alcohol-based hand rubs shall be in accordance with the applicable provisions of Sections 5704 and 5705.
- 7. Dispensers installed in occupancies with carpeted floors shall only be allowed in smoke compartments or fire areas equipped throughout with an approved automatic sprinkler system in accordance with the applicable building code NFPA 13 standard.
- 3. Delete Section 5705.5.1.
- E. The following changes shall be made to Section 5706, Special Operations:
  - 1. Add Section 5706.1.1 to read:

5706.1.1 Mobile fueling operations. Delivery of Class I, Class II, and Class III liquids to the fuel tank of a highway vehicle from a tank vehicle, a tank carried on a vehicle, or a nonportable container is prohibited.

Exceptions:

1. The refueling of highway vehicles in an emergency.

- 2. The refueling of vehicles in compliance with Sections 5706.5.4.1 through 5706.5.4.5.
- 3. Vehicles used for farm operations and machinery.
- 2. 1. Change Section 5706.2.4.2 to read:

5706.2.4.2 Vents. Tanks shall be provided with a method of normal and emergency venting. Normal vents shall be in accordance with the applicable building code.

Emergency vents shall be in accordance with Section 5704.2.7.4. Emergency vents shall be arranged to discharge in a manner that prevents localized overheating or flame impingement on any part of the tank in the event that vapors from such vents are ignited.

3. <u>2.</u> Change <u>Sections Section</u> 5706.2.6 and 5706.3.3 to read:

(N)5706.2.6 5706.2.6 Spill control drainage control and diking. Outdoor storage areas shall be provided with drainage control or diking as set forth in the applicable building code.

- 3. Change Section 5706.3.3 to read:
  - (N)5706.3.3 5706.3.3 Sumps. Sumps associated with wells shall be maintained in accordance with the applicable building code.
- 4. Delete Sections 5706.3.3.1 and 5706.3.3.3.
- 5. Change Sections 5706.4.1, 5706.4.2, 5706.4.4, 5706.4.7.6, and 5706.4.9 to read:

(N)5706.4.1 5706.4.1 Building construction. Buildings shall be maintained in accordance with the applicable building code.

(N)5706.4.2 5706.4.2 Means of egress. Means of egress from rooms in which liquids are stored, used or transferred by pumps shall be maintained in accordance with the applicable building code.

(N)5706.4.4 5706.4.4 Ventilation. Ventilation for rooms, buildings and enclosures in which Class I liquids are pumped, used or transferred shall be maintained in accordance with the applicable building code.

(N)5706.4.7.6 5706.4.7.6 Piping, valves and fittings. Piping, valves and fittings shall be maintained in accordance with the applicable building code.

(N)5706.4.9 5706.4.9 Drainage control. Loading and unloading areas shall be provided with drainage control in accordance with the applicable building code.

- 6. Change Sections 5706.4.10, 5706.5.1.2, 5706.5.1.3, 5706.5.1.5, 5706.5.1.6, 5706.8.1, 5706.8.3, and 5706.8.5 to read:
  - (N)5706.4.10 5706.4.10 Fire protection. Fire protection for bulk plants or terminals shall be maintained in accordance with the applicable building code.

(N)5706.5.1.2 5706.5.1.2 Weather protection canopies. Where weather protection canopies are provided, they shall be maintained in accordance with the applicable building code.

(N)5706.5.1.3 5706.5.1.3 Ventilation. Ventilation shall be maintained in accordance with the applicable building code.

(N)5706.5.1.5 5706.5.1.5 Spill control and secondary containment. The spill control and secondary containment system shall be maintained in accordance with the applicable building code.

(N)5706.5.1.6 5706.5.1.6 Fire protection. Fire protection shall be maintained in accordance with the applicable building code.

5706.8.1 Over-pressure or vacuum protection. Tanks and equipment shall have independent venting for over-pressure or vacuum conditions that might occur from malfunction of the vapor recovery or processing system.

Exception: For tanks, venting shall comply with the applicable building code.

5706.8.3 Vapor collection systems and overfill protection. The operation of the vapor collection system and overfill protection shall be in accordance with this section and Section 19.5 of NFPA 30.

5706.8.5 Overfill protection. Storage tanks served by vapor recovery or processing systems shall be equipped with overfill protection in accordance with the applicable building code.

7. Change Section 5707.1 and delete Sections 5707.1.1 through 5707.6.3.

#### Section 5707.1 to read:

5707.1 Mobile fueling operations. Delivery of Classes I, II, and III liquids to the fuel tank of a highway vehicle from a tank vehicle, a tank carried on a vehicle, or a nonportable container is prohibited.

#### **Exceptions:**

- 1. The refueling of highway vehicles in an emergency.
- 2. The refueling of vehicles in compliance with Sections 5706.5.4.1 through 5706.5.4.5.
- 3. Vehicles used for farm operations and machinery.

# 13VAC5-51-151.5. IFC Chapter 58 Flammable Gases and Flammable Cryogenic Fluids.

A. Change Sections 5801.1 and 5801.2 to read:

(N)5801.1 5801.1 Scope. The storage and use of flammable gases and flammable cryogenic fluids shall be in accordance with this chapter and NFPA 55. Compressed gases shall also comply with Chapter 53 and cryogenic fluids shall also comply with Chapter 55. Flammable cryogenic fluids shall comply with Section 5806. Hydrogen motor fuel-dispensing stations and repair garages and their associated aboveground hydrogen storage systems shall also be designed, constructed and maintained in accordance with Chapter 23 and NFPA 2.

#### Exceptions:

- 1. Gases used as refrigerants in refrigeration systems (see Section 606).
- 2. Liquefied petroleum gases and natural gases regulated by Chapter 61.
- 3. Fuel-gas systems and appliances regulated under the International Fuel Gas Code other than gaseous hydrogen systems and appliances.
- 4. Pyrophoric gases in accordance with Chapter 64.

5801.2 Permits. Permits shall be required as set forth in Section 107.2.

B. Change Sections 5803.1, 5803.1.1.2, 5803.1.5, and 5804.1 to read:

(N)5803.1 <u>5803.1</u> Quantities not exceeding the maximum allowable quantity per control area. The storage and use of flammable gases in amounts not exceeding the maximum allowable quantity per control area under the applicable building code.

(N)5803.1.1.2 5803.1.1.2 Aggregate quantity. The aggregate quantities of flammable gases used for maintenance purposes and operation of equipment shall not exceed the maximum allowable quantity per control area under the applicable building code.

(N)5803.1.5 5803.1.5 Electrical. Electrical wiring and equipment shall be maintained in accordance with the applicable building code.

(N)5804.1 5804.1 Indoor storage. Indoor storage of flammable gases in amounts exceeding the maximum allowable quantity per control area in accordance with the applicable building code and this chapter.

- C. Delete Sections 5804.1.1 and 5806.2.
- D. Change Section 5806.3 to read:

(N)5806.3 5806.3 Aboveground tanks for liquid hydrogen. Aboveground tanks for the storage of liquid hydrogen shall

be maintained in accordance with the applicable building code.

- E. Delete Sections 5806.3.1 through 5806.3.2.1.
- F. Change Section 5806.4 to read:

(N)5806.4 5806.4 Underground tanks for liquid hydrogen. Underground tanks for the storage of liquid hydrogen shall be maintained in accordance with the applicable building code.

- G. Delete Sections 5806.4.1 through 5806.4.3.
- H. Change Section 5806.4.4 to read:

(N)5806.4.4 5806.4.4 Anchorage and security. Anchorage provided for tanks and systems shall be maintained in accordance with the applicable building code.

- I. Delete Sections 5806.4.5 through 5806.4.8.3.
- J. Change Sections 5807.1.10 and 5808.1 to read:

(N)5807.1.10 5807.1.10 Electrical. Electrical components for metal hydride storage systems shall be maintained in accordance with NFPA 70.

(N)5808.1 5808.1 General. Where required by the applicable building code, hydrogen fuel gas rooms shall be maintained.

- K. Delete Sections 5808.2 through 5806.8.3.2.
- L. Change Sections 5808.4 and 5808.5 to read:

(N)5808.4 5808.4 Exhaust ventilation. Ventilation required for hydrogen fuel gas rooms shall be maintained in accordance with the applicable building code.

(N)5808.5 5808.5 Gas detection system. Gas detection systems required for hydrogen fuel gas rooms shall be maintained in accordance with the applicable building.

- M. Delete Sections 5808.5.1 through 5808.5.4 and 5808.5.2.
- N. Change Section Sections 5808.6 and 5808.7 to read:

(N)5808.6 5808.6 Explosion control. Explosion control required for hydrogen fuel gas rooms shall be maintained in accordance with the applicable building code.

(N)5808.7 5808.7 Standby power. Standby power provided for mechanical ventilation and gas detection systems shall be maintained in accordance with the applicable building code.

#### 13VAC5-51-152.5. IFC Chapter 59 Flammable Solids.

A. Change Section 5901.2 to read:

5901.2 Permits. Permits shall be required as set forth in Section 107.2.

B. Change Section 5904.1 to read:

(N)5904.1 5904.1 Indoor storage. Indoor storage of flammable solids in amounts exceeding the maximum allowable quantity per control area shall be in accordance with the applicable building code.

- C. Delete Section 5904.1.1.
- D. Change Section 590 Sections 5904.1.2, 5904.1.3, and 5906.2 to read:

(N)5904.1.2 5904.1.2 Aisles. Aisle widths between piles shall be maintained in accordance with the applicable building code.

(N)5904.1.3 5904.1.3 Basement storage. Flammable solids shall not be stored in basements unless previously approved.

(N)5906.2 5906.2 Storage of magnesium articles. The storage of magnesium shall be maintained in accordance with the applicable building code.

- E. Delete Sections 5906.2.1 through 5906.2.3.
- F. Change Sections 5906.3.1 and 5906.4 to read:

(N)5906.3.1 5906.3.1 Indoor storage. Indoor storage of pigs, ingots and billets shall be maintained in accordance with the applicable building code.

(N)5906.4 5906.4 Storage of fine magnesium scrap. The storage of scrap magnesium shall be maintained in accordance with the applicable building code.

- G. Delete Sections 5906.4.2 through 5906.5.4.
- H. Change Section 5906.5.5 to read:

(N)5906.5.5 5906.5.5 Electrical equipment. Electric wiring, fixtures and equipment in the immediate vicinity of and attached to dust-producing machines, shall be maintained in accordance with the applicable building code.

I. Delete Section 5906.5.6.

## 13VAC5-51-153. IFC Chapter 60 Highly Toxic and Toxic Materials.

A. Change Sections 6001.1 and 6001.2 to read:

6001.1 Scope. The outside storage and use of highly toxic and toxic materials and the maintenance and operational aspects of inside storage and use of highly toxic and toxic materials shall comply with this chapter. Compressed gases shall also comply with Chapter 53.

#### Exceptions:

1. Display and storage in Group M and storage in Group S occupancies complying with Section 5003.11.

- 2. Conditions involving pesticides or agricultural products as follows:
- 2.1. Application and release of pesticide, agricultural products and materials intended for use in weed abatement, erosion control, soil amendment or similar applications when applied in accordance with the manufacturer's instruction and label directions.
- 2.2. Transportation of pesticides in compliance with the Federal Hazardous Materials Transportation Act and regulations thereunder.
- 2.3. Storage in dwellings or private garages of pesticides registered by the U.S. Environmental Protection Agency to be utilized in and around the home, garden, pool, spa and patio.

6001.2 Permits. Permits shall be required as set forth in Section 107.2.

- B. Change Section 6003.1.4 to read:
- 6003.1.4 Indoor storage. Indoor storage of highly toxic and toxic solids and liquids shall comply with the applicable building code.
- C. Delete Sections 6003.1.4.1, 6003.1.4.2, and 6003.2.5.
- D. Change Sections 6004.1.2, <u>and</u> 6004.1.3, <u>and 6004.3.3</u> to read:
  - 6004.1.2 Gas cabinets. Gas cabinets containing highly toxic or toxic compressed gases shall comply with Section 5003.8.6 and the following requirements:
  - 1. The average ventilation velocity at the face of gas cabinet access ports or windows shall be not less than 200 feet per minute (1.02 m/s) with not less than 150 feet per minute (0.76 m/s) at any point of the access port or window.
  - 2. Gas cabinets shall be connected to an exhaust system.
  - 3. Gas cabinets shall not be used as the sole means of exhaust for any room or area.
  - 4. The maximum number of cylinders located in a single gas cabinet shall not exceed three, except that cabinets containing cylinders not exceeding 1 pound (0.454 kg) net contents are allowed to contain up to 100 cylinders.
  - 5. Gas cabinets required by Section 6004.2 or 6004.3 shall be equipped with an approved automatic sprinkler system in accordance with the applicable building code NFPA 13 standard. Alternative fire-extinguishing systems shall not be used.
  - 6004.1.3 Exhausted enclosures. Exhausted enclosures containing highly toxic or toxic compressed gases shall comply with Section 5003.8.5 and the following requirements:

- 1. The average ventilation velocity at the face of the enclosure shall be not less than 200 feet per minute (1.02 m/s) with not less than 150 feet per minute (0.76 m/s).
- 2. Exhausted enclosures shall be connected to an exhaust system.
- 3. Exhausted enclosures shall not be used as the sole means of exhaust for any room or area.
- 4. Exhausted enclosures required by Section 6004.2 or 6004.3 shall be equipped with an approved automatic sprinkler system in accordance with the applicable building code NFPA 13 standard. Alternative fire-extinguishing systems shall not be used.

6004.3.3 Outdoor storage weather protection for portable tanks and cylinders. Weather protection in accordance with Section 5004.13 shall be provided for portable tanks and cylinders located outdoors and not within gas cabinets or exhausted enclosures. The storage area shall be equipped with an approved automatic sprinkler system in accordance with the applicable building code.

Exception: An automatic sprinkler system is not required when:

- 1. All materials under the weather protection structure, including hazardous materials and the containers in which they are stored, are noncombustible.
- 2. The weather protection structure is located not less than 30 feet (9144 mm) from combustible materials or structures or is separated from such materials or structures using a fire barrier complying with Section 6004.3.2.1.1.
- E. Change Sections 6004.2.2.5, 6004.2.2.6, and 6004.2.2.8 to read:

(N)6004.2.2.5 6004.2.2.5 Piping and controls - stationary tanks. In addition to the requirements of Section 5003.2.2, piping and controls on stationary tanks shall comply with the following requirements:

1. Pressure relief devices shall be vented to a treatment system designed in accordance with Section 6004.2.2.7.

Exception: Pressure relief devices on outdoor tanks provided exclusively for relieving pressure due to fire exposure are not required to be vented to a treatment system provided that:

- 1. The material in the tank is not flammable.
- 2. The tank is located not less than 30 feet (9144 mm) from combustible materials or structures or is shielded by a fire barrier complying with Section 6004.3.2.1.1.
- 2. Filling or dispensing connections shall be provided with a means of local exhaust. Such exhaust shall be designed to capture fumes and vapors. The exhaust shall

be directed to a treatment system in accordance with Section 6004.2.2.7.

3. Stationary tanks shall be provided with a means of excess flow control on all tank inlet or outlet connections.

#### **Exceptions:**

- 1. Inlet connections designed to prevent backflow.
- 2. Pressure relief devices.

 $\frac{\text{(N)}6004.2.2.6}{\text{omply}}$  with Section 5003.8.4 and the following requirement:

1. The exhaust ventilation from gas rooms shall be directed to an exhaust system.

(N)6004.2.2.8 6004.2.2.8 Emergency power. Emergency power shall be maintained in accordance with the applicable building code.

F. Delete Sections 6004.2.2.8.1 and 6004.2.2.9, 6004.2.2.10, 6004.2.2.10.1, 6004.2.2.10.2, and 6004.2.2.10.3.

#### G. Change Section 6004.3.3 to read:

6004.3.3 Outdoor storage weather protection for portable tanks and cylinders. Weather protection in accordance with Section 5004.13 shall be provided for portable tanks and cylinders located outdoors and not within gas cabinets or exhausted enclosures. The storage area shall be equipped with an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard.

Exception: An automatic sprinkler system is not required when:

- 1. All materials under the weather protection structure, including hazardous materials and the containers in which they are stored, are noncombustible.
- 2. The weather protection structure is located not less than 30 feet (9144 mm) from combustible materials or structures or is separated from such materials or structures using a fire barrier complying with Section 6004.3.2.1.1.

## 13VAC5-51-154. IFC Chapter 61 Liquefied Petroleum Gases.

A. Change Section 6101.2 to read:

6101.2 Permits. Permits shall be required as set forth in Section 107.2. Distributors shall not fill an LP-gas container for which a permit is required unless a permit for installation has been issued for that location by the fire code official, except when the container is for temporary use on construction sites.

B. Change Section 6103.1 to read:

(N)6103.1 6103.1 General. LP-gas equipment shall be maintained in accordance with the code under which it was installed.

- C. Delete Section 6103.3.
- D. Change Section 6104.1 to read:

(N)6104.1 6104.1 General. The storage and handling of LP-gas and the maintenance of related equipment shall comply with applicable building code.

- E. Delete Sections 6104.2 through 6104.4 and Table 6104.3.
- F. Add Section 6106.4 to read:

6106.4 DOTn cylinders filled on site. U.S. Department of Transportation (DOTn) cylinders in stationary service that are filled on site and therefore are not under the jurisdiction of DOTn either shall be requalified in accordance with DOTn requirements or shall be visually inspected within 12 years of the date of manufacture or within five years from May 1, 2008, whichever is later, and within every five years thereafter, in accordance with the following:

- 1. Any cylinder that fails one or more of the criteria in Item 3 shall not be refilled or continued in service until the condition is corrected.
- 2. Personnel shall be trained and qualified to perform inspections.
- 3. Visual inspection shall be performed in accordance with the following:
- 3.1. The cylinder is checked for exposure to fire, dents, cuts, digs, gouges, and corrosion according to CGA C-6, Standards for Visual Inspection of Steel Compressed Gas Cylinders, except that paragraph 4.2.1(1) of that standard (which requires tare weight certification), shall not be part of the required inspection criteria.
- 3.2. The cylinder protective collar (where utilized) and the foot ring are intact and are firmly attached.
- 3.3. The cylinder is painted or coated to retard corrosion.
- 3.4. The cylinder pressure relief valve indicates no visible damage, corrosion of operating components, or obstructions.
- 3.5. There is no leakage from the cylinder or its appurtenances that is detectable without the use of instruments.
- 3.6. The cylinder is installed on a firm foundation and is not in contact with the soil.
- 3.7. A cylinder that passed the visual inspection shall be marked with the month and year of the examination followed by the letter "E" (example: 10-01E, indicating

requalification in October 2001 by the external inspection method).

3.8. The results of the visual inspection shall be documented, and a record of the inspection shall be retained for a five-year period.

Exception: Any inspection procedure outlined in Items 3.1 through 3.8 that would require a cylinder be moved in such a manner that disconnection from the piping system would be necessary shall be omitted, provided the other inspection results do not indicate further inspection is warranted.

G. Change Section 6108.1 to read:

(N)6108.1 6108.1 General. Fire protection for installations having LP-gas storage containers shall be maintained in accordance with the applicable building code.

- H. Delete Section 6109.11.2.
- I. Change Section 6111.2 to read:

6111.2 Unattended parking. The unattended parking of LP-gas tank vehicles shall be in accordance with Sections 6111.2.1 and 6111.2.2.

Exception: The unattended outdoor parking of LP-gas tank vehicles may also be in accordance with Section 9.7.2 of NFPA 58.

#### 13VAC5-51-154.2. IFC Chapter 62 Organic Peroxides.

- A. Change Section 6201.2 to read:
- 6201.2 Permits. Permits shall be required for organic peroxides as set forth in Section 107.2.
- B. Change Sections 6203.1 and 6203.1.1 to read:

(N)6203.1 6203.1 Storage and use. The storage and use of organic peroxides in amounts not exceeding the maximum allowable quantity per control area indicated in Section 5003.1 shall be maintained in accordance with the applicable building code.

(N)6203.1.1 6203.1.1 Special limitations for indoor storage and use by occupancy. The indoor storage and use of organic peroxides shall be maintained in accordance with the applicable building code.

- C. Delete Sections 6203.1.1.1 and 6203.1.1.3.
- D. Change Section 6203.1.1.4 to read:

(N)6203.1.1.4 6203.1.1.4 Classrooms. In classrooms in Group B, F or M occupancies, any amount of unclassified detonable and Class 1 organic peroxides shall be stored in accordance with the applicable building code.

- E. Delete Sections 6203.2 and 6204.1.1.
- F. Delete Table 6204.1.2.

G. Change Section 6203.1.2 through and 6204.1.6 to read:

(N)6204.1.2 6204.1.2 Distance from detached buildings to exposures. Detached storage buildings for Classes I, II, III, IV and V organic peroxides shall be located in accordance with the applicable building code. Detached buildings containing quantities of unclassified detonable organic peroxides shall be located in accordance with the applicable building code.

(N)6204.1.3 6204.1.3 Liquid-tight floor. Liquid-tight floors shall be maintained in accordance with the applicable building code.

(N)6204.1.4 6204.1.4 Electrical wiring and equipment. Electrical wiring and equipment in storage areas for Class I or II organic peroxides shall be maintained in accordance with the applicable building code.

 $\frac{\text{(N)}6204.1.5}{\text{6204.1.5}}$  Smoke detection. Smoke detection systems shall be maintained in accordance with the applicable building code.

(N)6204.1.6 6204.1.6 Maximum quantities. Maximum allowable quantities per building in a mixed occupancy building shall not exceed the amounts set forth by the applicable building code.

Maximum allowable quantities per building in a detached storage building shall not exceed the amounts set forth by the applicable building code.

H. Change Sections 6204.1.10 and 6204.1.11 to read:

(N)6204.1.10 6204.1.10 Explosion control. Indoor storage rooms, areas and buildings containing explosion control shall be maintained in accordance with the applicable building code.

(N)6204.1.11 6204.1.11 Standby power. Standby power shall be maintained in accordance with the applicable building code.

- I. Delete Section 6204.1.11.1.
- J. Change Section 6204.2.3 to read:

6204.2.3 Maximum quantities. Maximum quantities of organic peroxides in outdoor storage shall be in accordance with the applicable building code.

K. Change Section 6204.2.5 to read:

6204.2.5 Separation. In addition to the requirements of Section 5003.9.8, outdoor storage areas for organic peroxides in amounts exceeding those specified by the applicable building code shall be located a minimum distance of 50 feet (15 240 (15,240 mm) from other hazardous material storage.

K. Change Section 6204.2.3 to read:

(N)6204.2.3 Maximum quantities. Maximum quantities of organic peroxides in outdoor storage shall be in accordance with the applicable building code.

## 13VAC5-51-154.4. IFC Chapter 63 Oxidizers, Oxidizing Gases and Oxidizing Cryogenic Fluids.

A. Change Section 6301.2 to read:

6301.2 Permits. Permits shall be required as set forth in Section 107.2.

B. Change Section 6303.1 to read:

(N)6303.1 6303.1 Storage and use. The storage and use of oxidizing materials shall be maintained in accordance with the applicable building code.

- C. Delete Sections 6303.1.1 and 6303.1.1.1.
- D. Change Section 6303.1.1.1.1 to read:

6303.1.1.1.1 Group A, E, I or U occupancies. In Group A, E, I or U occupancies, any amount of Class 4 liquid and solid oxidizers shall be stored in accordance with the following:

- 1. Class 4 liquid and solid oxidizers shall be stored in hazardous materials storage cabinets complying with Section 5003.8.7.
- E. Delete Sections 6303.1.1.2 and 6303.1.1.3.
- F. Change Section 6303.1.2 to read:

(N)6303.1.2 6303.1.2 Emergency shutoff. Shutoff valves shall be maintained in accordance with the applicable building code.

- G. Delete Sections 6303.1.2.1 and 6303.1.2.2.
- H. Change Sections 6303.1.3 and 6303.2 to read:

(N)6303.1.3 6303.1.3 Ignition source control. Ignition sources in areas containing oxidizing gases shall be controlled in accordance with the applicable building code.

(N)6303.2 6303.2 Class 1 oxidizer storage configuration. The storage configuration of Class I liquid and solid oxidizers shall be as set forth in accordance with the applicable building code.

- I. Delete Table 6303.2.
- J. Change Sections 6304.1 through 6304.1.5 to read:

(N)6304.1 6304.1 Indoor storage. Indoor storage of oxidizing materials shall be maintained in accordance with the applicable building code.

(N)6304.1.1 6304.1.1 Explosion control. Explosion control for indoor storage rooms, areas and buildings containing Class 4 liquid or solid oxidizers shall be maintained in accordance with the applicable building code.

(N)6304.1.2 6304.1.2 Automatic sprinkler system. The automatic sprinkler system for oxidizer storage shall be maintained in accordance with the applicable building code.

(N)6304.1.3 6304.1.3 Liquid-tight floor. Liquid-tight floors of storage areas for liquid and solid oxidizers shall be maintained in accordance with the applicable building code.

(N)6304.1.4 6304.1.4 Smoke detection. Smoke detection systems shall be maintained in accordance with the applicable building code.

(N)6304.1.5 6304.1.5 Storage conditions. The maximum quantity of oxidizers per building in storage buildings shall be maintained in accordance with the applicable building code.

- K. Delete Tables 6304.1.5(1), 6304.1.5(2), and 6304.1.5(3).
- L. Change Section 6304.1.8 to read:

6304.1.8 Detached storage. Storage of liquid and solid oxidizers shall be in detached buildings where required by the applicable building code.

M. Change Section 6304.2.2 to read:

6304.2.2 Storage configuration for liquid and solid oxidizers. Storage configuration for liquid and solid oxidizers shall be in accordance with the applicable building code.

N. Change Sections 6305.1 and 6306.4 to read:

(N)6305.1 6305.1 Scope. The use of oxidizers shall be in accordance with the applicable building code.

(N)6306.4 6306.4 Maximum aggregate quantity. The maximum aggregate quantity of liquid oxygen allowed in storage and in use in each dwelling unit shall be maintained in accordance with the applicable building code.

#### 13VAC5-51-154.6. IFC Chapter 64 Pyrophoric Materials.

A. Change Section 6401.2 to read:

6401.2 Permits. Permits shall be required as set forth in Section 107.2.

B. Change Sections 6403.1 and 6403.1.1 to read:

(N)6403.1 6403.1 Storage and use. The storage and use of pyrophoric material shall be maintained in accordance with the applicable building code.

(N)6403.1.1 6403.1.1 Emergency shutoff. Emergency shutoff valves shall be maintained in accordance with the applicable building code.

C. Delete Sections 6403.1.1.1, 6403.1.1.2, and 6403.2.

D. Change Sections 6404.1 and 6404.1.1 to read:

(N)6404.1 6404.1 Indoor storage. Indoor storage of pyrophoric materials shall be maintained in accordance with the applicable building code.

(N)6404.1.1 6404.1.1 Liquid-tight floor. Liquid-tight floors of storage areas containing pyrophoric liquids shall be maintained in accordance with the applicable building code.

E. Delete Sections 6404.1.2, 6404.1.3, 6404.1.4, and 6404.2.2.

# 13VAC5-51-154.7. IFC Chapter 65 Pyroxylin (Cellulose Nitrate) Plastics.

A. Change Section 6501.2 to read:

6501.2 Permits. Permits shall be required as set forth in Section 107.2.

- B. Delete Sections 6504.1.1 and 6504.1.3.
- C. Change Sections 6504.1 and 6504.2 to read:

6504.1 Raw material. Raw cellulose nitrate (pyroxylin) plastic material in a Group F building shall be stored and handled in accordance with Sections 6504.1.2 and 6504.1.4 through 6504.1.7.

(N)6504.2 6504.2 Fire protection. Fire protection for the manufacture or storage of articles of cellulose nitrate (pyroxylin) plastic in quantities exceeding 100 pounds (45 kg) shall be in accordance with the applicable building code.

## 13VAC5-51-154.8. IFC Chapter 66 Unstable (Reactive) Materials.

A. Change Section 6601.2 to read:

6601.2 Permits. Permits shall be required as set forth in Section 107.2.

B. Change Sections 6603.1 and 6603.1.1 to read:

(N)6603.1 6603.1 Storage and use. Quantities of unstable (reactive) materials not exceeding the maximum allowable quantity per control area shall be maintained in accordance with the applicable building code.

(N)6603.1.1 6603.1.1 General. The storage and use of unstable (reactive) materials shall be in accordance with the applicable building code.

- C. Delete Section 6603.1.2.
- D. Change Sections 6603.1.2.1 and 6604.1 to read:

6603.1.2.1 Group A, E, I, or U occupancies. In Group A, E, I, or U occupancies, any amount of Classes 3 and 4 unstable (reactive) materials shall be stored in accordance with the applicable building code.

(N)6604.1 6604.1 Indoor storage. Indoor storage of unstable (reactive) materials shall be maintained in accordance with the applicable building code.

E. Delete Section 6604.1.1.

<del>D.</del> <u>F.</u> Change Sections 6604.1.2, 6604.1.3, and 6604.1.5 to read:

(N)6604.1.2 6604.1.2 Explosion control. Explosion control for indoor storage shall be maintained in accordance with the applicable building code.

(N)6604.1.3 6604.1.3 Liquid-tight floor. Liquid-tight floors of storage areas shall be maintained in accordance with the applicable building code.

(N)6604.1.5 6604.1.5 Location in building. Unstable (reactive) materials shall not be stored in basements unless approved.

# 13VAC5-51-154.9. IFC Chapter 67 Water-Reactive Solids and Liquids.

A. Change Section 6701.2 to read:

6701.2 Permits. Permits shall be required as set forth in Section 107.2.

B. Change Section 6703.1 to read:

(N)6703.1 6703.1 Storage and use. The storage and use of water reactive solids and liquids shall be maintained in accordance with the applicable building code.

C. Change Section 6703.2 to read:

(N)6703.2 6703.2 Quantities exceeding the maximum allowable quantity per control area.

D. Change Section 6704.1 to read:

(N)6704.1 6704.1 Indoor storage. Indoor storage of water-reactive solids and liquids shall be maintained in accordance with the applicable building code.

E. Change Section 6704.1.1 to read:

(N)6704.1.1 6704.1.1 Detached storage.

F. Change Section 6704.1.2 to read:

(N)6704.1.2 6704.1.2 Liquid-tight floor. Liquid-tight floors in storage areas for water reactive solids and liquids shall be maintained in accordance with the applicable building code.

G. Delete Section 6704.1.3.

H. Change Section 6704.1.5 to read:

(N)6704.1.5 6704.1.5 Storage configuration. Aisle widths between piles shall be maintained in accordance with the applicable building code.

I. Change Section 6704.1.1 6704.1.6 to read:

(N)6704.1.6 6704.1.6 Explosion control. Explosion control for indoor storage rooms shall be maintained in accordance with the applicable building code.

J. Change Section 6704.2.5 to read:

(N)6704.2.5 6704.2.5 Containment. Secondary containment shall be provided in accordance with the applicable building code.

#### 13VAC5-51-155. IFC Chapter 80 Referenced Standards.

Change the referenced standards as follows (standards not shown remain the same):

Standard reference number	Title	Referenced in code section number		
CGA C-6 (2001)	Standards for Visual Inspection of Steel Compressed Gas Cylinders	6106.4		
NFPA 45-15	Standard on Fire Protection for Laboratories Using Chemicals	5001.7.5, 5001.7.10, 5001.7.11		
NFPA 96-17	Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations	319.4, 904.3		
UL 1278-00	Standard for Movable and Wall- or Ceiling- Hung Electric Room Heaters	605.10.1		
UL 1805 2002	Standard for Laboratory Hoods and Cabinets	5001.7.11		
<u>NA3178</u>	Smokeless Powder for Small Arms	<u>202</u>		

DOCUMENTS INCORPORATED BY REFERENCE (13VAC5-51)

American National Standards Institute, 25 West 43rd Street, Fourth Floor, New York, NY 10036 (https://www.ansi.org/):

ANSI Z21.69/CSA 6.16-09, Connectors for Movable Gas Appliances

#### ANSI/CGA P-18, Standard for Bulk Inert Gas Systems

The American Society of Mechanical Engineers, Two Park Avenue, New York, NY 10016-5990 (https://www.asme.org/):

ASME Boiler and Pressure Vessel Code-2010/2011 addenda

ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 (https://www.astm.org/):

ASTM D 92-12b, Standard Test Method for Flash and Fire Points by Cleveland Open Cup

ASTM E 84-2013A, Test Method for Surface Burning Characteristics of Building Materials

ASTM E 108-2011, Standard Test Method for Fire Tests of Roof Coverings

ASTM E 1354-2013 1354-2016, Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter

ASTM E <del>1537-13</del> <u>1537-15</u>, Standard Test Method for Fire Testing of Upholstered Furniture

ASTM E 1590-13 1590-13, Standard Test Method for Fire Testing of Mattresses

State of California Department of Consumer Affairs, Bureau of Electronics and Appliance Repair, Home Furnishings and Thermal Insulation, 4244 South Market Court, Suite D, Sacramento, CA 95834-1243 (http://www.bearhfti.ca.gov/):

California Technical Bulletin 129-1992

California Technical Bulletin 133-1991

Compressed Gas Association, 14501 George Carter Way, Suite 103, Chantilly, VA 20151 (http://www.cganet.com/):

ANSI/P-18-2006, Standard for Bulk Inert Gas Systems

CGA C-6-2001, Standards for Visual Inspection of Steel Compressed Gas Cylinders, Eighth Edition

European Committee for Standardization (EN), Central Secretariat, Rue de Stassart 36, B-10 50 Brussels (https://www.cen.eu/):

EN 1081, 1998 Resilient Floor Coverings-Determination of the Electrical Resistance

International Code Council, Inc., 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001-2070 (http://www.iccsafe.org/):

International Fire Code - 2015 2018 Edition

International Fuel Gas Code - 2015 2018 Edition

International Residential Code - 2015 2018 Edition

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471 (http://www.nfpa.org/):

NFPA 2-11 2-16, Hydrogen Technologies Code

NFPA <u>11-10</u> <u>11-16</u>, Standard for Low-, Medium- and High-Expansion Foam

NFPA <u>12-11</u> <u>12-15</u>, Standard on Carbon Dioxide Extinguishing Systems

NFPA <u>12A 09</u> <u>12A-15</u>, Standard on Halon 1301 Fire Extinguishing Systems

NFPA 13-13, Standard for the Installation of Sprinkler Systems

NFPA 13D-13, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes

NFPA 13R-13, Standard for the Installation of Sprinkler Systems in Low Rise Residential Occupancies

NFPA 14-13 14-16, Standard for the Installation of Standpipe and Hose Systems

NFPA 16-15, Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems

NFPA 17-13 17-17, Standard for Dry Chemical Extinguishing Systems

NFPA 17A-13 17A-17, Standard for Wet Chemical Extinguishing Systems

NFPA <u>25-14</u> <u>25-17</u>, Standard for Inspection, Testing and Maintenance of Water-based Fire Protection Systems

NFPA 30-12 30-18, Flammable and Combustible Liquids Code

NFPA 30A-15 30A-18, Code for Motor Fuel Dispensing Facilities and Repair Garages

NFPA 30B-15, Code for the Manufacture and Storage of Aerosol Products

NFPA 31-11 31-16, Standard for the Installation of Oil-Burning Equipment

NFPA 32-11 32-16, Standard for Drycleaning Plants

NFPA 34-15, Standard for Dipping, Coating and Printing Processes Using Flammable or Combustible Liquids

NFPA 35-11 35-16, Standard for the Manufacture of Organic Coatings

NFPA 45-15, Standard on Fire Protection for Laboratories Using Chemicals

NFPA 52-13 52-16, Vehicular Gaseous Fuel System Code

NFPA 55-13 55-16, Compressed Gases and Cryogenic Fluids Code

NFPA 58-14 58-17, Liquefied Petroleum Gas Code

NFPA 59A-13 59A-16, Standard for the Production, Storage and Handling of Liquefied Natural Gas (LNG)

NFPA 69-14, Standard on Explosion Prevention Systems

NFPA 70-14 70-17, National Electrical Code

NFPA <del>72-13</del> <u>72-16</u>, National Fire Alarm and Signaling Code

NFPA 80-16, Standard for Fire Doors and Other Opening Protectives

NFPA 86-15, Standard for Ovens and Furnaces

NFPA 96-17, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations

NFPA 110-13 110-16, Standard for Emergency and Standby Power Systems

NFPA 111-13, Standard on Stored Electrical Energy Emergency and Standby Power Systems

NFPA 211-13 211-16, Standard for Chimneys, Fireplaces, Vents and Solid Fuel-Burning Appliances

NFPA 286-15, Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth

NFPA 303-11 303-16, Fire Protection Standard for Marinas and Boatyards

NFPA 495-13 495-18, Explosives Materials Code

NFPA 701-10, Standard Methods of Fire Tests for Flame - Propagation of Textiles and Films

NFPA 720-15, Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment

NFPA 853-15, Installation of Stationary Fuel Cell Power Systems

NFPA 1123-14 1123-18, Code for Fireworks Display

NFPA <u>1124-06</u> <u>1124-17</u>, Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles

NFPA <u>1126-11</u> <u>1126-16</u>, Standard for the Use of Pyrotechnics Before a Proximate Audience

NFPA 2001-15- . Standard on Clean Agent Fire Extinguishing Systems

NFPA 2010-15, Standard for Fixed Aerosol Fire-Extinguishing Systems

Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, IL 60062 (http://www.ul.com/):

UL 80-07 80-16, Steel Tanks for Oil-Burner Fuels and Other Combustible Liquids-with revisions through August 2009

UL 87A-12, Outline of Investigation for Power-Operated Dispensing Devices for Gasoline and Gasoline/ethanol Blends with Nominal Ethanol Concentrations up to 85 Percent

UL 142-06, Steel Aboveground Tanks for Flammable and Combustible Liquids-with revisions through February 12, 2010

<u>UL 199E-04</u>, Outline of Investigation for Fire Testing of Sprinklers and Water Spray Nozzles for Protection of Deep Fat Fryers

UL 217-06, Single and Multiple Station Smoke Alarmswith revisions through April 2012

UL 710B-2011, Recirculating Systems

UL 790-04, Standard Test Methods for Fire Tests of Roof Coverings-with revisions through October 2008

UL 1278-00, Standard for Movable and Wall- or Ceiling-Hung Electric Room Heaters, Third Edition, June 21, 2000

UL 1315-95, Standard for Safety for Metal Waste Paper Containers-with revisions through September 2012

UL 1805-2002, Standard for Laboratory Hoods and Cabinets

VA.R. Doc. No. R19-5886; Filed January 7, 2020, 2:23 p.m.

#### Proposed Regulation

REGISTRAR'S NOTICE: The Board of Housing and Community Development is claiming an exemption from Article 2 of the Administrative Process Act pursuant to § 2.2-4006 A 12 of the Code of Virginia, which excludes regulations adopted by the Board of Housing and Community Development pursuant to the Statewide Fire Prevention Code (§ 27-94 et seq.), the Industrialized Building Safety Law (§ 36-70 et seq.), the Uniform Statewide Building Code (§ 36-97 et seq.), and § 36-98.3 of the Code of Virginia, provided the board (i) provides a Notice of Intended Regulatory Action in conformance with the provisions of § 2.2-4007.01, (ii) publishes the proposed regulation and provides an opportunity for oral and written comments as provided in § 2.2-4007.03, and (iii) conducts at least one public hearing as provided in §§ 2.2-4009 and 36-100 prior to the publishing of the proposed regulations. The Board of Housing and Community Development will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

<u>Title of Regulation:</u> 13VAC5-63. Virginia Uniform Statewide Building Code (amending 13VAC5-63-10, 13VAC5-63-20, 13VAC5-63-30, 13VAC5-63-50, 13VAC5-63-60, 13VAC5-63-80, 13VAC5-63-100, 13VAC5-63-120,

13VAC5-63-130, 13VAC5-63-150, 13VAC5-63-160, 13VAC5-63-190 through 13VAC5-63-280, 13VAC5-63-295 through 13VAC5-63-360, 13VAC5-63-400 through 13VAC5-63-440, 13VAC5-63-450, 13VAC5-63-470, 13VAC5-63-480, 13VAC5-63-490, 13VAC5-63-510, 13VAC5-63-520, 13VAC5-63-530, 13VAC5-63-540, 13VAC5-63-545; repealing 13VAC5-63-445).

Statutory Authority: § 36-98 of the Code of Virginia.

#### **Public Hearing Information:**

March 16, 2020 - 10 a.m. - Virginia Housing Development Authority Virginia Housing Center, 4224 Cox Road, Glen Allen, Virginia 23060.

Public Comment Deadline: April 6, 2020.

Agency Contact: Kyle Flanders, Senior Policy Analyst, Department of Housing and Community Development, Main Street Centre, 600 East Main Street, Suite 300, Richmond, VA 23219, telephone (804) 786-6761, FAX (804) 371-7090, TTY (804) 371-7089, or email kyle.flanders@dhcd.virginia.gov.

<u>Small Business Impact Review Report of Findings:</u> This proposed regulatory action serves as the report of the findings of the regulatory review pursuant to § 2.2-4007.1 of the Code of Virginia.

Background: The Uniform Statewide Building Code (USBC) is a regulation governing the construction, maintenance, and rehabilitation of new and existing building and structures. The USBC uses nationally recognized model building codes and standards produced by the International Code Council and other standard-writing groups as the basis for the technical provisions of the regulation. Every three years, new editions of the model codes become available. At that time, the Board of Housing and Community Development (BHCD) initiates a regulatory action to incorporate the newest editions of the model codes into the regulation as well as accepting proposals for changes to the regulation from affected client groups and the public.

#### Summary:

*The proposed amendments include the following:* 

In 13VAC5-63-50, adding high school technical training programs and college fields to the list of education and experience requirements that would meet qualification standards for technical assistants.

In 13VAC5-63-60, adding a provision for allowing the building official to consider other nationally recognized guidelines when deciding to approve a code modification.

In 13VAC5-63-80, adding emergency supplemental hardware language to the permit application requirement and removing the requirement for an affidavit to obtain a permit.

In 13VAC5-63-100, (i) adding requirements for a building official to consult and notify the fire official prior to the approval of emergency supplemental hardware, (ii) removing the requirement that the signature of the building official be on the physical permit, (iii) adding noncompliance with provisions of the code as a reason for revocation of a permit, (iv) adding a requirement for the name and certification number of the elevator mechanic performing the tests on an elevator, (v) removing the requirement that a certificate of occupancy be issued within five working days, (vi) adding a provision that the notice of violation can be issued to other persons deemed responsible in addition to the person performing the work, (vii) adding a provision that when no certificate exists, a building department can verify in writing that a certificate did exist at one point, and (viii) allowing for applications to be submitted electronically.

In 13VAC5-63-130, adding a requirement to include the name and certification number of the elevator mechanic performing tests on elevators, escalators, and other related conveyances.

In 13VAC5-63-160, adding an exception for the issuance of a certificate of occupancy for additions to one-family and two-family homes where a certificate of occupancy already exists.

In 13VAC5-63-210, (i) restoring the energy certificate requirement and allowing the certificate to be kept at an off-site location for multi-family buildings, (ii) requiring blower door testing for air leakage rating of buildings, (iii) removing the prohibition against using building cavities as plenums, (iv) removing the requirement for residential exhaust hoods in kitchens for grease laden vapors as the requirements for this are specified in the International Mechanical Code and don't belong in the International Energy Conservation Code, (v) revising landing and floor height requirements for exterior doors, (vi) allowing the use of appendix Q for tiny houses, (vii) revising foundation anchorage language to match the International Building Code, (viii) clarifying that only one foundation vent is required within three feet of each corner, (ix) adding an option for relining existing building sewers and building draining piping, (x) adding an option to provide a notice by electronic means for a local board of building code appeals hearing, and (xi) changing the minimum slope for drainage on impervious surfaces within 10 feet of the building foundation.

In 13VAC5-63-220, changing the section reference for short term holding areas.

In 13VAC5-63-240, (i) adding an additional benchmark of four or more stories for Class III standpipes, (ii) removing an exception from the Virginia Construction Code (VCC) for visible alarm notification appliances in alterations where a fire alarm system is replaced or upgraded because

this falls within the purview of the Virginia Existing Building Code (VEBC), (iii) adding an exception to infrastructure for public safety wireless communications where localities do not provide the additional communication equipment required for the operation of the system, and (iv) adding provisions and parameters to allow the use of emergency supplemental hardware.

In 13VAC5-63-245, (i) clarifying that protection is provided for increased occupants in compartments at each story with a horizontal exit and (ii) deleting an exception for tread depth and height requirements for stair risers.

In 13VAC5-63-250, allowing portions of areas in places of religious worship to not be accessible that are primarily for performance of religious ceremonies

In 13VAC5-63-320, (i) adding a definition for service sink, (ii) requiring footbaths and pedicure baths to be protected against backflow, (iii) removing a conflict regarding an exception for using primer for solvent cement on pipe joints, (iv) adding an option for relining existing building sewers and building drainage piping, and (v) adding a standard for rainwater harvesting.

In 13VAC5-63-330, incorporating more International Building Code requirements for elevator machine rooms, exceptions for fire barriers, and stickers labeling such requirements.

In 13VAC5-63-431, (i) deleting some provisions that could be interpreted as retrofit requirements, (ii) including references for replacement window emergency escape openings, and (iii) specifying what is permitted and what's an exception in the roof recovery requirements.

In 13VAC5-63-433.3, updating the Level 1 and Level 2 alteration definitions, (ii) changing the compliance for interior finishes in historic buildings to a table in the VCC rather than incorporating an ASTM standard.

In 13VAC5-63-434.5, allowing existing guard heights to be acceptable rather than having to comply with a specific section.

In 13VAC5-63-470, adding a note that points to the Virginia Residential Landlord and Tenant Act (§ 55.1-1200 et seq.) for responsible parties for a violation.

In 13VAC5-63-480, requiring elevator inspections to include the name and certification number of the elevator mechanic.

In 13VAC5-63-520, updating rodent harborage and infestation requirements to state and federal health standards.

In 13VAC5-63-540, addressing fuel oil and propane tanks.

In 13VAC5-63-545, deleting a provision that could be interpreted as a retrofit.

Other proposed changes update citations to incorporated codes and statutes, reorganize standards to more appropriate placement in the code, or clarify or correlate.

#### Part I Construction

## 13VAC5-63-10. Chapter 1 Administration; Section 101 General.

A. Section 101.1 Short title. The Virginia Uniform Statewide Building Code, Part I, Construction, may be cited as the Virginia Construction Code or as the VCC. The term "USBC" shall mean the VCC unless the context in which the term is used clearly indicates it to be an abbreviation for the entire Virginia Uniform Statewide Building Code or for a different part of the Virginia Uniform Statewide Building Code.

Note: This code is also known as the  $\frac{2015}{2018}$  edition of the USBC due to the use of the  $\frac{2015}{2018}$  editions of the model codes.

B. Section 101.2 Incorporation by reference. Chapters 2 - 35 of the 2018 International Building Code, published by the International Code Council, Inc., are adopted and incorporated by reference to be an enforceable part of the USBC. The term "IBC" means the 2015 2018 International Building Code, published by the International Code Council, Inc. Any codes and standards referenced in the IBC are also considered to be part of the incorporation by reference, except that such codes and standards are used only to the prescribed extent of each such reference. In addition, any provisions of the appendices of the IBC specifically identified to be part of the USBC are also considered to be part of the incorporation by reference.

Note 1: The IBC references other International Codes and standards including the following major codes:

2015 2018 International Plumbing Code (IPC)

2015 2018 International Mechanical Code (IMC)

2014 2017 NFPA 70

2015 2018 International Fuel Gas Code (IFGC)

2015 2018 International Energy Conservation Code (IECC)

2015 2018 International Residential Code (IRC)

Note 2: The IRC is applicable to the construction of detached one-family and two-family dwellings and townhouses as set out in Section 310.

C. Section 101.3 Numbering system. A dual numbering system is used in the USBC to correlate the numbering system of the Virginia Administrative Code with the numbering system of the IBC. IBC numbering system designations are provided in the catchlines of the Virginia

Administrative Code sections. Cross references between sections or chapters of the USBC use only the IBC numbering system designations. The term "chapter" is used in the context of the numbering system of the IBC and may mean a chapter in the USBC, a chapter in the IBC or a chapter in a referenced code or standard, depending on the context of the use of the term. The term "chapter" is not used to designate a chapter of the Virginia Administrative Code, unless clearly indicated.

- D. Section 101.4 Arrangement of code provisions. The USBC is comprised of the combination of (i) the provisions of Chapter 1, Administration, which are established herein, (ii) Chapters 2 - 35 of the IBC, which are incorporated by reference in Section 101.2, and (iii) the changes to the text of the incorporated chapters of the IBC that are specifically identified. The terminology "changes to the text of the incorporated chapters of the IBC that are specifically identified" shall also be referred to as the "state amendments to the IBC." Such state amendments to the IBC are set out using corresponding chapter and section numbers of the IBC numbering system. In addition, since Chapter 1 of the IBC is not incorporated as part of the USBC, any reference to a provision of Chapter 1 of the IBC in the provisions of Chapters 2 - 35 of the IBC is generally invalid. However, where the purpose of such a reference would clearly correspond to a provision of Chapter 1 established herein, then the reference may be construed to be a valid reference to such corresponding Chapter 1 provision.
- E. Section 101.5 Use of terminology and notes. The provisions of this code shall be used as follows:
  - 1. The term "this code," or "the code," where used in the provisions of Chapter 1, in Chapters 2 35 of the IBC or in the state amendments to the IBC means the USBC, unless the context clearly indicates otherwise.
  - 2. The term "this code," or "the code," where used in a code or standard referenced in the IBC means that code or standard, unless the context clearly indicates otherwise.
  - 3. The use of notes in Chapter 1 is to provide information only and shall not be construed as changing the meaning of any code provision.
  - 4. Notes in the IBC, in the codes and standards referenced in the IBC and in the state amendments to the IBC may modify the content of a related provision and shall be considered to be a valid part of the provision, unless the context clearly indicates otherwise.
- F. Section 101.6 Order of precedence. The provisions of this code shall be used as follows:
  - 1. The provisions of Chapter 1 of this code supersede any provisions of Chapters 2 35 of the IBC that address the same subject matter and impose differing requirements.
  - 2. The provisions of Chapter 1 of this code supersede any provisions of the codes and standards referenced in the

- IBC that address the same subject matter and impose differing requirements.
- 3. The state amendments to the IBC supersede any provisions of Chapters 2 35 of the IBC that address the same subject matter and impose differing requirements.
- 4. The state amendments to the IBC supersede any provisions of the codes and standards referenced in the IBC that address the same subject matter and impose differing requirements.
- 5. The provisions of Chapters 2 35 of the IBC supersede any provisions of the codes and standards referenced in the IBC that address the same subject matter and impose differing requirements.
- G. Section 101.7 Administrative provisions. The provisions of Chapter 1 establish administrative requirements, which include but are not limited to provisions relating to the scope of the code, enforcement, fees, permits, inspections and disputes. Any provisions of Chapters 2 - 35 of the IBC or any provisions of the codes and standards referenced in the IBC that address the same subject matter and impose differing requirements are deleted and replaced by the provisions of Chapter 1. Further, any administrative requirements contained in the state amendments to the IBC shall be given the same precedence as the provisions of Chapter 1. Notwithstanding the above, where administrative requirements of Chapters 2 -35 of the IBC or of the codes and standards referenced in the IBC are specifically identified as valid administrative requirements in Chapter 1 of this code or in the state amendments to the IBC, then such requirements are not deleted and replaced.

Note: The purpose of this provision is to eliminate overlap, conflicts and duplication by providing a single standard for administrative, procedural and enforcement requirements of this code.

H. Section 101.8 Definitions. The definitions of terms used in this code are contained in Chapter 2 along with specific provisions addressing the use of definitions. Terms may be defined in other chapters or provisions of the code and such definitions are also valid.

Note: The order of precedence outlined in Section 101.6 may be determinative in establishing how to apply the definitions in the IBC and in the referenced codes and standards.

#### 13VAC5-63-20. Section 102 Purpose and scope.

A. Section 102.1 Purpose. In accordance with § 36-99 of the Code of Virginia, the purpose of the USBC is to protect the health, safety and welfare of the residents of the Commonwealth of Virginia, provided that buildings and structures should be permitted to be constructed at the least possible cost consistent with recognized standards of health, safety, energy conservation and water conservation, including

provisions necessary to prevent overcrowding, rodent or insect infestation, and garbage accumulation; and barrier-free provisions for the physically handicapped and aged.

B. Section 102.2 Scope. This section establishes the scope of the USBC in accordance with § 36-98 of the Code of Virginia. The USBC shall supersede the building codes and regulations of the counties, municipalities and other political subdivisions and state agencies. This code also shall supersede the provisions of local ordinances applicable to single-family residential construction that (i) regulate dwelling foundations or crawl spaces, (ii) require the use of specific building materials or finishes in construction, or (iii) require minimum surface area or numbers of windows; however, this code shall not supersede proffered conditions accepted as a part of a rezoning application, conditions imposed upon the grant of special exceptions, special or conditional use permits or variances, conditions imposed upon a clustering of single-family homes and preservation of open space development through standards, conditions, and criteria established by a locality pursuant to subdivision 8 of § 15.2-2242 of the Code of Virginia or § 15.2-2286.1 of the Code of Virginia, or land use requirements in airport or highway overlay districts, or historic districts created pursuant to § 15.2-2306 of the Code of Virginia, or local flood plain regulations adopted as a condition of participation in the National Flood Insurance Program.

Note: Requirements relating to functional design are contained in Section 103.10 103.5 of this code.

- C. Section 102.2.1 Invalidity of provisions. To the extent that any provisions of this code are in conflict with Chapter 6 (§ 36-97 et seq.) of Title 36 of the Code of Virginia or in conflict with the scope of the USBC, those provisions are considered to be invalid to the extent of such conflict.
- D. Section 102.3 Exemptions. The following are exempt from this code:
  - 1. Equipment and wiring used for providing utility, communications, information, cable television, broadcast or radio service in accordance with all of the following conditions:
    - 1.1. The equipment and wiring, are located on either rights-of-way or property for which the service provider has rights of occupancy and entry.
    - 1.2. Buildings housing exempt equipment and wiring shall be subject to the USBC.
    - 1.3. The equipment and wiring exempted by this section shall not create an unsafe condition prohibited by the USBC.
  - 2. Support structures owned or controlled by a provider of publicly regulated utility service or its affiliates for the transmission and distribution of electric service in accordance with all of the following conditions:

- 2.1. The support structures are located on either rights-ofway or property for which the service provider has rights of occupancy and entry.
- 2.2. The support structures exempted by this section shall not create an unsafe condition prohibited by the USBC.
- 3. Direct burial poles used to support equipment or wiring providing communications, information or cable television services. The poles exempted by this section shall not create an unsafe condition prohibited by the USBC.
- 4. Electrical equipment, transmission equipment, and related wiring used for wireless transmission of radio, broadcast, telecommunications, or information service in accordance with all of the following conditions:
  - 4.1. Buildings housing exempt equipment and wiring and structures supporting exempt equipment and wiring shall be subject to the USBC.
  - 4.2. The equipment and wiring exempted by this section shall not create an unsafe condition prohibited by the USBC.
- 5. Manufacturing, processing, and product handling machines and equipment that do not produce or process hazardous materials regulated by this code, including those portions of conveyor systems used exclusively for the transport of associated materials or products, and all of the following service equipment:
  - 5.1. Electrical equipment connected after the last disconnecting means.
  - 5.2. Plumbing piping and equipment connected after the last shutoff valve or backflow device and before the equipment drain trap.
  - 5.3. Gas piping and equipment connected after the outlet shutoff valve.

Manufacturing and processing machines that produce or process hazardous materials regulated by this code are only required to comply with the code provisions regulating the hazardous materials.

- 6. Parking lots and sidewalks that are not part of an accessible route.
- 7. Nonmechanized playground or recreational equipment such as swing sets, sliding boards, climbing bars, jungle gyms, skateboard ramps, and similar equipment where no admission fee is charged for its use or for admittance to areas where the equipment is located.
- 8. Industrialized buildings subject to the Virginia Industrialized Building Safety Regulations (13VAC5-91) and manufactured homes subject to the Virginia Manufactured Home Safety Regulations (13VAC5-95); except as provided for in Section 427 and in the case of

demolition of such industrialized buildings or manufactured homes.

- 9. Farm buildings and structures, except for a building or a portion of a building located on a farm that is operated as a restaurant as defined in § 35.1-1 of the Code of Virginia and licensed as such by the Virginia Board of Health pursuant to Chapter 2 (§ 35.1-11 et seq.) of Title 35.1 of the Code of Virginia. However, farm buildings and structures lying within a flood plain or in a mudslide-prone area shall be subject to flood-proofing regulations or mudslide regulations, as applicable.
- 10. Federally owned buildings and structures unless federal law specifically requires a permit from the locality. Underground storage tank installations, modifications and removals shall comply with this code in accordance with federal law.
- 11. Off-site manufactured intermodal freight containers, moving containers, and storage containers placed on site temporarily or permanently for use as a storage container.
- 12. Automotive lifts.

#### 13VAC5-63-30. Section 103 Application of code.

- A. Section 103.1 General. In accordance with § 36-99 of the Code of Virginia, the USBC shall prescribe building regulations to be complied with in the construction and rehabilitation of buildings and structures, and the equipment therein.
- B. Section 103.1.1 Virginia Existing Building Code. Part II of the Virginia Uniform Statewide Building Code, also known as the "Virginia Existing Building Code," or the "VEBC" is applicable to construction and rehabilitation activities in existing buildings and structures, as those terms are defined in the VEBC, except where specifically addressed in the VCC.
- C. Section 103.2 When applicable to new construction. Construction for which a permit application is submitted to the local building department on or after the effective date of the 2015 2018 edition of the code shall comply with the provisions of this code, except for permit applications submitted during a one-year period beginning on the effective date of the 2015 2018 edition of the code. The applicant for a permit during such one-year period shall be permitted to choose whether to comply with the provisions of this code or the provisions of the edition of the code in effect immediately prior to the 2015 2018 edition. This provision shall also apply to subsequent amendments to this code based on the effective date of such amendments. In addition, when a permit has been properly issued under a previous edition of this code, this code shall not require changes to the approved construction documents, design or construction of such a building or structure, provided the permit has not been suspended or revoked.

- D. Section 103.3 Nonrequired equipment. The following criteria for nonrequired equipment is in accordance with § 36-103 of the Code of Virginia. Building owners may elect to install partial or full fire alarms or other safety equipment that was not required by the edition of the USBC in effect at the time a building was constructed without meeting current requirements of the code, provided the installation does not create a hazardous condition. Permits for installation shall be obtained in accordance with this code. In addition, as a requirement of this code, when such nonrequired equipment is to be installed, the building official shall notify the appropriate fire official or fire chief.
- E. Section 103.3.1 Reduction in function or discontinuance of nonrequired fire protection systems. When a nonrequired fire protection system is to be reduced in function or discontinued, it shall be done in such a manner so as not to create a false sense of protection. Generally, in such cases, any features visible from interior areas shall be removed, such as sprinkler heads, smoke detectors or alarm panels or devices, but any wiring or piping hidden within the construction of the building may remain. Approval of the proposed method of reduction or discontinuance shall be obtained from the building official.
- F. Section 103.4 Use of certain provisions of referenced codes. The following provisions of the IBC and of other indicated codes or standards are to be considered valid provisions of this code. Where any such provisions have been modified by the state amendments to the IBC, then the modified provisions apply.
  - 1. Special inspection requirements in Chapters 2 35.
  - 2. Testing requirements and requirements for the submittal of construction documents in any of the ICC codes referenced in Chapter 35 and in the IRC.
  - 3. Section R301.2 of the IRC authorizing localities to determine climatic and geographic design criteria.
  - 4. Flood load or flood-resistant construction requirements in the IBC or the IRC, including, but not limited to, any such provisions pertaining to flood elevation certificates that are located in Chapter 1 of those codes. Any required flood elevation certificate pursuant to such provisions shall be prepared by a land surveyor licensed in Virginia or an RDP a registered design professional (RDP).
  - 5. Section R101.2 of the IRC.
  - 6. Section N1102.1 of the IRC and Sections C402.1.1 and R402.1 of the IECC.
- G. Section 103.5 Functional design. The following criteria for functional design is in accordance with § 36-98 of the Code of Virginia. The USBC shall not supersede the regulations of other state agencies that require and govern the functional design and operation of building related activities not covered by the USBC, including but not limited to (i)

public water supply systems, (ii) waste water treatment and disposal systems, and (iii) solid waste facilities. Nor shall state agencies be prohibited from requiring, pursuant to other state law, that buildings and equipment be maintained in accordance with provisions of this code. In addition, as established by this code, the building official may refuse to issue a permit until the applicant has supplied certificates of functional design approval from the appropriate state agency or agencies. For purposes of coordination, the locality may require reports to the building official by other departments or agencies indicating compliance with their regulations applicable to the functional design of a building or structure as a condition for issuance of a building permit or certificate of occupancy. Such reports shall be based upon review of the plans or inspection of the project as determined by the locality. All enforcement of these conditions shall not be the responsibility of the building official, but rather the agency imposing the condition.

Note: Identified state agencies with functional design approval are listed in the "Related Laws Package," which is available from DHCD.

H. Section 103.6 Amusement devices and inspections. In accordance with § 36-98.3 of the Code of Virginia, to the extent they are not superseded by the provisions of § 36-98.3 of the Code of Virginia and the VADR, the provisions of the USBC shall apply to amusement devices. In addition, as a requirement of this code, inspections for compliance with the VADR shall be conducted either by local building department personnel or private inspectors provided such persons are certified as amusement device inspectors under the VCS.

I. Section 103.7 State buildings and structures. This section establishes the application of the USBC to state-owned buildings and structures in accordance with § 36-98.1 of the Code of Virginia. The USBC shall be applicable to all state-owned buildings and structures, with the exception that §§ 2.2-1159 through 2.2-1161 of the Code of Virginia shall provide the standards for ready access to and use of state-owned buildings by the physically handicapped.

Any state-owned building or structure or building built on state-owned property for which preliminary plans were prepared or on which construction commenced after the initial effective date of the USBC, shall remain subject to the provisions of the USBC that were in effect at the time such plans were completed or such construction commenced. Subsequent reconstruction, renovation or demolition of such building or structure shall be subject to the pertinent provisions of this code.

Acting through the Division of Engineering and Buildings, the Virginia Department of General Services shall function as the building official for state-owned buildings. The department shall review and approve plans and specifications, grant modifications, and establish such rules and regulations as may be necessary to implement this section. It shall

provide for the inspection of state-owned buildings and enforcement of the USBC and standards for access by the physically handicapped by delegating inspection and USBC enforcement duties to the State Fire Marshal's Office, to other appropriate state agencies having needed expertise, and to local building departments, all of which shall provide such assistance within a reasonable time and in the manner requested. State agencies and institutions occupying buildings shall pay to the local building department the same fees as would be paid by a private citizen for the services rendered when such services are requested by the department. The department may alter or overrule any decision of the local building department after having first considered the local building department's report or other rationale given for its decision. When altering or overruling any decision of a local building department, the department shall provide the local building department with a written summary of its reasons for doing so.

Notwithstanding any provision of this code to the contrary, roadway tunnels and bridges owned by the Virginia Department of Transportation shall be exempt from this code. The Virginia Department of General Services shall not have jurisdiction over such roadway tunnels, bridges and other limited access highways; provided, however, that the Department of General Services shall have jurisdiction over any occupied buildings within any Department of Transportation rights-of-way that are subject to this code.

Except as provided in subsection E of § 23.1-1016 of the Code of Virginia, and notwithstanding any provision of this code to the contrary, at the request of a public institution of higher education, the Virginia Department of General Services, as further set forth in this provision, shall authorize that institution of higher education to contract with a building official of the locality in which the construction is taking place to perform any inspection and certifications required for the purpose of complying with this code. The department shall publish administrative procedures that shall be followed in contracting with a building official of the locality. The authority granted to a public institution of higher education under this provision to contract with a building official of the locality shall be subject to the institution meeting the conditions prescribed in subsection A of § 23.1-1002 of the Code of Virginia.

Note: In accordance with § 36-98.1 of the Code of Virginia, roadway tunnels and bridges shall be designed, constructed and operated to comply with fire safety standards based on nationally recognized model codes and standards to be developed by the Virginia Department of Transportation in consultation with the State Fire Marshal. Emergency response planning and activities related to the standards shall be developed by the Department of Transportation and coordinated with the appropriate local officials and emergency service providers. On an annual basis, the Department of Transportation shall provide a report on the

maintenance and operability of installed fire protection and detection systems in roadway tunnels and bridges to the State Fire Marshal.

J. Section 103.7.1 Certification of state enforcement personnel. State enforcement personnel shall comply with the applicable requirements of Section 105 for certification.

#### 13VAC5-63-50. Section 105 Local building department.

A. Section 105.1 Appointment of building official. Every local building department shall have a building official as the executive official in charge of the department. The building official shall be appointed in a manner selected by the local governing body. After permanent appointment, the building official shall not be removed from office except for cause after having been afforded a full opportunity to be heard on specific and relevant charges by and before the appointing authority. DHCD shall be notified by the appointing authority within 30 days of the appointment or release of a permanent or acting building official.

Note: Building officials are subject to sanctions in accordance with the VCS.

- B. Section 105.1.1 Qualifications of building official. The building official shall have at least five years of building experience as a licensed professional engineer or architect, building, fire or trade inspector, contractor, housing inspector or superintendent of building, fire or trade construction or at least five years of building experience after obtaining a degree in architecture or engineering, with at least three years in responsible charge of work. Any combination of education and experience that would confer equivalent knowledge and ability shall be deemed to satisfy this requirement. The building official shall have general knowledge of sound engineering practice in respect to the design and construction of structures, the basic principles of fire prevention, the accepted requirements for means of egress and the installation of elevators and other service equipment necessary for the health, safety and general welfare of the occupants and the public. The local governing body may establish additional qualification requirements.
- C. Section 105.1.2 Certification of building official. An acting or permanent building official shall be certified as a building official in accordance with the VCS within one year after being appointed as acting or permanent building official.

Exception: A building official in place prior to April 1, 1983, shall not be required to meet the certification requirements in this section while continuing to serve in the same capacity in the same locality.

D. Section 105.1.3 Noncertified building official. Except for a building official exempt from certification under the exception to Section 105.1.2, any acting or permanent building official who is not certified as a building official in accordance with the VCS shall attend the core module of the

Virginia Building Code Academy or an equivalent course in an individual or regional code academy accredited by DHCD within 180 days of appointment. This requirement is in addition to meeting the certification requirement in Section 105.1.2.

Note: Continuing education and periodic training requirements for DHCD certifications are set out in the VCS.

E. Section 105.2 Technical assistants. The building official, subject to any limitations imposed by the locality, shall be permitted to utilize technical assistants to assist the building official in the enforcement of the USBC. DHCD shall be notified by the building official within 60 days of the employment of, contracting with or termination of all technical assistants.

Note: Technical assistants are subject to sanctions in accordance with the VCS.

- F. Section 105.2.1 Qualifications of technical assistants. A technical assistant shall have at least three years of experience and general knowledge in at least one of the following areas: building construction; building construction conceptual and administrative processes; building, fire or housing inspections; plumbing, electrical or mechanical trades; or fire protection, elevator or property maintenance work. Any combination of education and experience that would confer equivalent knowledge and ability, including high school technical training programs or college engineering, architecture, or construction degree programs, shall be deemed to satisfy this requirement. The locality may establish additional qualification requirements.
- G. Section 105.2.2 Certification of technical assistants. A technical assistant shall be certified in the appropriate subject area within 18 months after becoming a technical assistant. When required by local policy to have two or more certifications, a technical assistant shall obtain the additional certifications within three years from the date of such requirement.

#### **Exceptions:**

- 1. A technical assistant in place prior to March 1, 1988, shall not be required to meet the certification requirements in this section while continuing to serve in the same capacity in the same locality.
- 2. A permit technician in place prior to the effective date of the 2015 edition of the code shall not be required to meet the certification requirements in this section while continuing to serve in the same capacity in the same locality.

Note: Continuing education and periodic training requirements for DHCD certifications are set out in the VCS.

H. Section 105.3 Conflict of interest. The standards of conduct for building officials and technical assistants shall be

in accordance with the provisions of the State and Local Government Conflict of Interests Act, Chapter 31 (§ 2.2-3100 et seq.) of Title 2.2 of the Code of Virginia.

I. Section 105.4 Records. The local building department shall retain a record of applications received, permits, certificates, notices and orders issued, fees collected and reports of inspection in accordance with The Library of Virginia's General Schedule Number Six.

## 13VAC5-63-60. Section 106 Powers and duties of the building official.

- A. Section 106.1 Powers and duties, generally. The building official shall enforce this code as set out herein and as interpreted by the State Review Board.
- B. Section 106.2 Delegation of authority. The building official may delegate powers and duties except where such authority is limited by the local government. However, such limitations of authority by the local government are not applicable to the third-party inspector policy required by Section 113.7.1 nor shall such limitations of authority by the local government have the effect of altering the provisions of this code or creating building regulations. When such delegations are made, the building official shall be responsible for assuring that they are carried out in accordance with the provisions of this code.
- C. Section 106.3 Issuance of modifications. Upon written application by an owner or an owner's agent, the building official may approve a modification of any provision of the USBC provided the spirit and functional intent of the code are observed and public health, welfare and safety are assured. The decision of the building official concerning a modification shall be made in writing and the application for a modification and the decision of the building official concerning such modification shall be retained in the permanent records of the local building department.

Note: The USBC references nationally recognized model codes and standards. Future amendments to such codes and standards are not automatically included in the USBC; however the building official should give them due consideration in deciding whether to approve a modification.

- D. Section 106.3.1 Substantiation of modification. The building official may require or may consider a statement from an RDP a registered design professional (RDP) or other person competent in the subject area of the application as to the equivalency of the proposed modification. In addition, the building official may require the application to include construction documents sealed by an RDP. The building official may also consider nationally recognized guidelines in deciding whether to approve a modification.
- E. Section 106.3.2 Use of performance code. Compliance with the provisions of a nationally recognized performance code when approved as a modification shall be considered to

constitute compliance with this code. All documents submitted as part of such consideration shall be retained in the permanent records of the local building department.

#### 13VAC5-63-80. Section 108 Application for permit.

- A. Section 108.1 When applications are required. Application for a permit shall be made to the building official and a permit shall be obtained prior to the commencement of any of the following activities, except that applications for emergency construction, alterations or equipment replacement shall be submitted by the end of the first working day that follows the day such work commences. In addition, the building official may authorize work to commence pending the receipt of an application or the issuance of a permit.
  - 1. Construction or demolition of a building or structure. Installations or alterations involving (i) the removal or addition of any wall, partition or portion thereof, (ii) any structural component, (iii) the repair or replacement of any required component of a fire or smoke rated assembly, (iv) the alteration of any required means of egress system, including the addition of emergency supplemental hardware, (v) water supply and distribution system, sanitary drainage system or vent system, (vi) electric wiring, (vii) fire protection system, mechanical systems, or fuel supply systems, or (viii) any equipment regulated by the USBC.
  - 2. For change of occupancy, application for a permit shall be made when a new certificate of occupancy is required by the VEBC.
  - 3. Movement of a lot line that increases the hazard to or decreases the level of safety of an existing building or structure in comparison to the building code under which such building or structure was constructed.
  - 4. Removal or disturbing of any asbestos containing materials during the construction or demolition of a building or structure, including additions.
- B. Section 108.2 Exemptions from application for permit. Notwithstanding the requirements of Section 108.1, application for a permit and any related inspections shall not be required for the following; however, this section shall not be construed to exempt such activities from other applicable requirements of this code. In addition, when an owner or an owner's agent requests that a permit be issued for any of the following, then a permit shall be issued and any related inspections shall be required.
  - 1. Installation of wiring and equipment that (i) operates at less than 50 volts, (ii) is for broadband communications systems, (iii) is exempt under Section 102.3(1) or 102.3(4), or (iv) is for monitoring or automation systems in dwelling units, except when any such installations are located in a

plenum, penetrate fire rated or smoke protected construction or are a component of any of the following:

- 1.1. Fire alarm system.
- 1.2. Fire detection system.
- 1.3. Fire suppression system.
- 1.4. Smoke control system.
- 1.5. Fire protection supervisory system.
- 1.6. Elevator fire safety control system.
- 1.7. Access or egress control system or delayed egress locking or latching system.
- 1.8. Fire damper.
- 1.9. Door control system.
- 2. One story detached structures used as tool and storage sheds, playhouses or similar uses, provided the building area does not exceed 256 square feet (23.78 m<sup>2</sup>) and the structures are not classified as a Group F-1 or H occupancy.
- 3. Detached prefabricated buildings housing the equipment of a publicly regulated utility service, provided the floor area does not exceed 150 square feet (14 m<sup>2</sup>).
- 4. Tents or air-supported structures, or both, that cover an area of 900 square feet (84 m²) or less, including within that area all connecting areas or spaces with a common means of egress or entrance, provided such tents or structures have an occupant load of 50 or less persons.
- 5. Fences of any height unless required for pedestrian safety as provided for by Section 3306, or used for the barrier for a swimming pool.
- 6. Concrete or masonry walls, provided such walls do not exceed six feet in height above the finished grade. Ornamental column caps shall not be considered to contribute to the height of the wall and shall be permitted to extend above the six feet height measurement.
- 7. Retaining walls supporting less than three feet of unbalanced fill that are not constructed for the purpose of impounding Class I, II or III-A liquids or supporting a surcharge other than ordinary unbalanced fill.
- 8. Swimming pools that have a surface area not greater than 150 square feet (13.95  $\text{m}^2$ ), do not exceed 5,000 gallons (19.000 (19,000 L) and are less than 24 inches (610 mm) deep.
- 9. Signs under the conditions in Section H101.2 of Appendix H.
- 10. Replacement of above-ground existing LP-gas containers of the same capacity in the same location and

- associated regulators when installed by the serving gas supplier.
- 11. Flagpoles 30 feet (9144 mm) or less in height.
- 12. Temporary ramps serving dwelling units in Group Groups R-3 and R-5 occupancies where the height of the entrance served by the ramp is no more than 30 inches (762 mm) above grade.
- 13. Construction work deemed by the building official to be minor and ordinary and which does not adversely affect public health or general safety.
- 14. Ordinary repairs that include the following:
- 14.1. Replacement of windows and doors with windows and doors of similar operation and opening dimensions that do not require changes to the existing framed opening and that are not required to be fire rated in Group R-2 where serving a single dwelling unit and in Groups R-3, R-4 and R-5.
- 14.2. Replacement of plumbing fixtures and well pumps in all groups without alteration of the water supply and distribution systems, sanitary drainage systems or vent systems.
- 14.3. Replacement of general use snap switches, dimmer and control switches, 125 volt-15 or 20 ampere receptacles, luminaires (lighting fixtures) and ceiling (paddle) fans in Group R-2 where serving a single dwelling unit and in Groups R-3, R-4 and R-5.
- 14.4. Replacement of mechanical appliances provided such equipment is not fueled by gas or oil in Group R-2 where serving a single-family dwelling and in Groups R-3, R-4 and R-5.
- 14.5. Replacement of an unlimited amount of roof covering or siding in Groups Group R-3, R-4 or R-5 provided the building or structure is not in an area where the nominal design wind speed is greater than 100 miles per hour (44.7 meters per second) and replacement of 100 square feet (9.29 m²) or less of roof covering in all groups and all wind zones.
- 14.6. Replacement of 256 square feet 23.78 m² (23.78 m²) or less of roof decking in Groups Group R-3, R-4 or R-5 unless the decking to be replaced was required at the time of original construction to be fire-retardant-treated or protected in some other way to form a fire-rated wall termination.
- 14.7. Installation or replacement of floor finishes in all occupancies.
- 14.8. Replacement of Class C interior wall or ceiling finishes installed in Groups A, E and I and replacement of all classes of interior wall or ceiling finishes in other groups.

- 14.9. Installation or replacement of cabinetry or trim.
- 14.10. Application of paint or wallpaper.
- 14.11. Other repair work deemed by the building official to be minor and ordinary which does not adversely affect public health or general safety.
- 15. Crypts, mausoleums, and columbaria structures not exceeding 1500 1.500 square feet (139.35 m<sup>2</sup>) in area if the building or structure is not for occupancy and used solely for the interment of human or animal remains and is not subject to special inspections.
- 16. Billboard safety upgrades to add or replace steel catwalks, steel ladders, or steel safety cable.

#### Exceptions:

- 1. Application for a permit may be required by the building official for the installation of replacement siding, roofing and windows in buildings within a historic district designated by a locality pursuant to § 15.2-2306 of the Code of Virginia.
- 2. Application for a permit may be required by the building official for any items exempted in this section that are located in a special flood hazard area.
- C. Section 108.3 Applicant information, processing by mail. Application for a permit shall be made by the owner or lessee of the relevant property or the agent of either or by the RDP, contractor or subcontractor associated with the work or any of their agents. The full name and address of the owner, lessee and applicant shall be provided in the application. If the owner or lessee is a corporate body, when and to the extent determined necessary by the building official, the full name and address of the responsible officers shall also be provided.

A permit application may be submitted by mail and such permit applications shall be processed by mail, unless the permit applicant voluntarily chooses otherwise. In no case shall an applicant be required to appear in person.

The building official may accept applications for a permit through electronic submissions provided the information required by this section is obtained.

D. Section 108.4 Prerequisites to obtaining permit. In accordance with § 54.1-1111 of the Code of Virginia, any person applying to the building department for the construction, removal or improvement of any structure shall furnish prior to the issuance of the permit either (i) satisfactory proof to the building official that he is duly licensed or certified under the terms or Chapter 11 (§ 54.1-1000 et seq.) of Title 54.1 of the Code of Virginia to carry out or superintend the same or (ii) file a written statement, supported by an affidavit, that he is not subject to licensure or certification as a contractor or subcontractor pursuant to Chapter 11 of Title 54.1 of the Code of Virginia. The applicant shall also furnish satisfactory proof that the taxes or

license fees required by any county, city, or town have been paid so as to be qualified to bid upon or contract for the work for which the permit has been applied.

E. Section 108.5 Mechanics' lien agent designation. In accordance with § 36-98.01 of the Code of Virginia, a building permit issued for any one-family or two-family residential dwelling shall at the time of issuance contain, at the request of the applicant, the name, mailing address, and telephone number of the mechanics' lien agent as defined in § 43-1 of the Code of Virginia. If the designation of a mechanics' lien agent is not so requested by the applicant, the building permit shall at the time of issuance state that none has been designated with the words "None Designated."

Note: In accordance with § 43-4.01A of the Code of Virginia, a permit may be amended after it has been initially issued to name a mechanics' lien agent or a new mechanics' lien agent.

- F. Section 108.6 Application form, description of work. The application for a permit shall be submitted on a form or forms supplied by the local building department. The application shall contain a general description and location of the proposed work and such other information as determined necessary by the building official.
- G. Section 108.7 Amendments to application. An application for a permit may be amended at any time prior to the completion of the work governed by the permit. Additional construction documents or other records may also be submitted in a like manner. All such submittals shall have the same effect as if filed with the original application for a permit and shall be retained in a like manner as the original filings.
- H. Section 108.8 Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned six months after the date of filing unless such application has been pursued in good faith or a permit has been issued, except that the building official is authorized to grant one or more extensions of time if a justifiable cause is demonstrated.

#### 13VAC5-63-100. Section 110 Permits.

A. Section 110.1 Approval and issuance of permits. The building official shall examine or cause to be examined all applications for permits or amendments to such applications within a reasonable time after filing. If the applications or amendments do not comply with the provisions of this code or all pertinent laws and ordinances, the permit shall not be issued and the permit applicant shall be notified in writing of the reasons for not issuing the permit. If the application complies with the applicable requirements of this code, a permit shall be issued as soon as practicable. The issuance of permits shall not be delayed in an effort to control the pace of construction of new detached one- or two-family dwellings.

B. Section 110.1.1 Consultation and notification. Prior to approval of emergency supplemental hardware, the building code official shall consult with the local fire code official, or state fire code official if no local fire code official exists, and head of the local law-enforcement agency. The local fire code official; the state fire code official; and the local fire, EMS, and law-enforcement first responders shall be notified of such approval. After approval of such emergency supplemental hardware by the building code official.

<u>C.</u> Section 110.2 Types of permits. Separate or combined permits may be required for different areas of construction such as building construction, plumbing, electrical, and mechanical work, or for special construction as determined appropriate by the locality. In addition, permits for two or more buildings or structures on the same lot may be combined. Annual permits may also be issued for any construction regulated by this code. The annual permit holder shall maintain a detailed record of all alterations made under the annual permit. Such record shall be available to the building official and shall be submitted to the local building department if requested by the building official.

C. D. Section 110.3 Asbestos inspection in buildings to be renovated or demolished; exceptions. In accordance with § 36-99.7 of the Code of Virginia, the local building department shall not issue a building permit allowing a building for which an initial building permit was issued before January 1, 1985, to be renovated or demolished until the local building department receives certification from the owner or his agent that the affected portions of the building have been inspected for the presence of asbestos by an individual licensed to perform such inspections pursuant to § 54.1-503 of the Code of Virginia and that no asbestoscontaining materials were found or that appropriate response actions will be undertaken in accordance with the requirements of the Clean Air Act National Emission Standard for the Hazardous Air Pollutant (NESHAPS) (40 CFR Part 61, Subpart M), and the asbestos worker protection requirements established by the U.S. Occupational Safety and Health Administration for construction workers (29 CFR 1926.1101). Local educational agencies that are subject to the requirements established by the Environmental Protection Agency under the Asbestos Hazard Emergency Response Act (AHERA) shall also certify compliance with 40 CFR Part 763 and subsequent amendments thereto.

To meet the inspection requirements above, except with respect to schools, asbestos inspection of renovation projects consisting only of repair or replacement of roofing, floorcovering, or siding materials may be satisfied by a statement that the materials to be repaired or replaced are assumed to contain friable asbestos and that asbestos installation, removal, or encapsulation will be accomplished by a licensed asbestos contractor.

The provisions of this section shall not apply to single-family dwellings or residential housing with four or fewer units unless the renovation or demolition of such buildings is for commercial or public development purposes. The provisions of this section shall not apply if the combined amount of regulated asbestos-containing material involved in the renovation or demolition is less than 260 linear feet on pipes or less than 160 square feet on other facility components or less than 35 cubic feet off facility components where the length or area could not be measured previously.

An abatement area shall not be reoccupied until the building official receives certification from the owner that the response actions have been completed and final clearances have been measured. The final clearance levels for reoccupancy of the abatement area shall be 0.01 or fewer asbestos fibers per cubic centimeter if determined by Phase Contrast Microscopy analysis (PCM) or 70 or fewer structures per square millimeter if determined by Transmission Electron Microscopy analysis (TEM).

D. E. Section 110.4 Fire apparatus access road requirements. The permit applicant shall be informed of any requirements for providing or maintaining fire apparatus access roads prior to the issuance of a building permit.

E. F. Section 110.5 Signature on and posting Posting of permits; limitation of approval. The signature of the building official or authorized representative shall be on or affixed to every permit. A copy of the permit shall be posted on the construction site for public inspection until the work is completed. Such posting shall include the street or lot number; if one has been assigned, to be readable from a public way. In addition, each building or structure to which a street number has been assigned shall, upon completion, have the number displayed so as to be readable from the public way.

A permit shall be considered authority to proceed with construction in accordance with this code, the approved construction documents, the permit application and any approved amendments or modifications. The permit shall not be construed to otherwise authorize the omission or amendment of any provision of this code.

F. G. Section 110.6 Abandonment of work. A building official shall be permitted to revoke a permit if work on the site authorized by the permit is not commenced within six months after issuance of the permit, or if the authorized work on the site is suspended or abandoned for a period of six months after the permit is issued; however, permits issued for plumbing, electrical and mechanical work shall not be revoked if the building permit is still in effect. It shall be the responsibility of the permit applicant to prove to the building official that authorized work includes substantive progress, characterized by approved inspections as specified in Section 113.3 of at least one inspection within a period of six months or other evidence that would indicate substantial work has

been performed. Upon written request, the building official may grant one or more extensions of time, not to exceed one year per extension.

- G. H. Section 110.7 Single-family dwelling permits. The building official shall be permitted to require a three\_year time limit to complete construction of new detached single-family dwellings, additions to detached single-family dwellings and residential accessory structures. The time limit shall begin from the issuance date of the permit. The building official may grant extensions of time if the applicant can demonstrate substantive progress, characterized by approved inspections as specified in Section 113.3 of at least one inspection within a period of six months or other evidence that would indicate substantial work has been performed.
- H. <u>I.</u> Section 110.8 Revocation of a permit. The building official may revoke a permit or approval issued under this code in the case of any false statement, misrepresentation of fact, abandonment of work, failure to complete construction as required by Section 110.7, noncompliance with provisions of this code and pertinent laws and ordinances, or incorrect information supplied by the applicant in the application or construction documents on which the permit or approval was based.

# 13VAC5-63-120. Section 112 Workmanship, materials and equipment.

- A. Section 112.1 General. It shall be the duty of any person performing work covered by this code to comply with all applicable provisions of this code and to perform and complete such work so as to secure the results intended by the USBC. Damage to regulated building components caused by violations of this code or by the use of faulty materials or installations shall be considered as separate violations of this code and shall be subject to the applicable provisions of Section 115.
- B. Section 112.2 Alternative methods or materials. In accordance with § 36-99 of the Code of Virginia, where practical, the provisions of this code are stated in terms of required level of performance so as to facilitate the prompt acceptance of new building materials and methods. When generally recognized standards of performance are not available, this section and other applicable requirements of this code provide for acceptance of materials and methods whose performance is substantially equal in safety to those specified on the basis of reliable test and evaluation data presented by the proponent. In addition, as a requirement of this code, the building official shall require that sufficient technical data be submitted to substantiate the proposed use of any material, equipment, device, assembly or method of construction. The building official may consider nationally recognized guidelines in making a determination.
- C. Section 112.3 Documentation and approval. In determining whether any material, equipment, device,

assembly or method of construction complies with this code, the building official shall approve items listed by nationally recognized testing laboratories, when such items are listed for the intended use and application, and in addition, may consider the recommendations of RDPs. Approval shall be issued when the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code and that the material, equipment, device, assembly or method of construction offered is, for the purpose intended, at least the equivalent of that prescribed by the code. Such approval is subject to all applicable requirements of this code and the material, equipment, device, assembly or method of construction shall be installed in accordance with the conditions of the approval and their listings. In addition, the building official may revoke such approval whenever it is discovered that such approval was issued in error or on the basis of incorrect information, or where there are repeated violations of the USBC.

D. Section 112.3.1 Conditions of listings. Where conflicts between this code and conditions of the listing or the manufacturer's installation instructions occur, the provisions of this code shall apply.

Exception: Where a code provision is less restrictive than the conditions of the listing of the equipment or appliance or the manufacturer's installation instructions, the conditions of the listing and the manufacturer's installation instructions shall apply.

- E. Section 112.4 Used material and equipment. Used materials, equipment and devices may be approved provided they have been reconditioned, tested or examined and found to be in good and proper working condition and acceptable for use by the building official.
- F. Section 112.5 Defective materials. Notwithstanding any provision of this code to the contrary, where action has been taken and completed by the BHCD under subsection D of § 36-99 of the Code of Virginia establishing new performance standards for identified defective materials, this section sets forth the new performance standards addressing the prospective use of such materials and establishes remediation standards for the removal of any defective materials already installed, which when complied with enables the building official to certify that the building is deemed to comply with the edition of the USBC under which the building was originally constructed with respect to the remediation of the defective materials.
- G. Section 112.5.1 Drywall, performance standard. All newly installed gypsum wallboard shall not be defective drywall as defined in Section 112.5.1.1.1.
- H. Section 112.5.1.1 Remediation standards. The following provisions establish remediation standards where defective drywall was installed in buildings.

- I. Section 112.5.1.1.1 Definition. For the purposes of this section the term "defective drywall" means gypsum wallboard that (i) contains elemental sulfur exceeding 10 parts per million that when exposed to heat or humidity, or both, emits volatile sulfur compounds in quantities that cause observable corrosion on electrical wiring, plumbing pipes, fuel gas lines, or HVAC equipment, or any components of the foregoing or (ii) has been designated by the U.S. Consumer Product Safety Commission as a product with a product defect that constitutes a substantial product hazard within the meaning of § 15(a)(2) of the Consumer Product Safety Act (15 USC § 2064(a)(2)).
- J. Section 112.5.1.1.2 Permit. Application for a permit shall be made to the building official, and a permit shall be obtained prior to the commencement of remediation work undertaken to remove defective drywall from a building and for the removal, replacement, or repair of corroded electrical, plumbing, mechanical, or fuel gas equipment and components.
- K. Section 112.5.1.1.3 Protocol. Where remediation of defective drywall is undertaken, the following standards shall be met. The building official shall be permitted to consider and approve modifications to these standards in accordance with Section 106.3.
- L. Section 112.5.1.1.3.1 Drywall. Drywall in the building, whether defective or nondefective, shall be removed and discarded, including fasteners that held any defective drywall to prevent small pieces of drywall from remaining under fasteners.

#### **Exceptions:**

- 1. Nondefective drywall not subject to the corrosive effects of any defective drywall shall be permitted to be left in place in buildings where the defective drywall is limited to a defined room or space or isolated from the rest of the building and the defective drywall can be positively identified. If the room or space containing the defective drywall also contains any nondefective drywall, the nondefective drywall in that room or space shall also be removed.
- 2. In multifamily buildings where defective drywall was not used in the firewalls between units and there are no affected building systems behind the firewalls, the firewalls shall be permitted to be left in place.
- M. Section 112.5.1.1.3.2 Insulation and other building components. Insulation in walls and ceilings shall be removed and discarded. Carpet and vinyl flooring shall be removed and discarded. Woodwork, trim, cabinets, and tile or wood floors may be left in place or may be reused.

#### **Exceptions:**

- 1. Closed-cell foam insulation is permitted to be left in place if testing for off-gassing from defective drywall is negative, unless its removal is required to gain access.
- 2. Insulation, carpet, or vinyl flooring in areas not exposed to defective drywall or to the effects of defective drywall, may be left in place or reused.
- N. Section 112.5.1.1.3.3 Electrical wiring, equipment, devices, and components. All electrical wiring regulated by this code shall be permitted to be left in place, but removal or cleaning of exposed ends of the wiring to reveal clean or uncorroded surfaces is required. All electrical equipment, devices, and components of the electrical system of the building regulated by this code shall be removed and discarded. This shall include all smoke detectors.

#### **Exceptions:**

- 1. Electrical equipment, devices, or components in areas not exposed to the corrosive effects of defective drywall shall be permitted to be left in place or reused. Electrical equipment, devices, or components in areas exposed to the corrosive effects of defective drywall shall be cleaned, repaired, or replaced.
- 2. Cord and plug connected appliances are not subject to this code and, therefore, cannot be required to be removed or replaced.
- Note: All low-voltage wiring associated with security systems, door bells, elevator controls, and other such components shall be removed and replaced or repaired.
- O. Section 112.5.1.1.3.4 Plumbing and fuel gas piping, fittings, fixtures, and equipment. All copper fuel gas piping and all equipment utilizing fuel gas with copper, silver, or aluminum components shall be removed and discarded. All copper plumbing pipes and fittings shall be removed and discarded. Plumbing fixtures with copper, silver, or aluminum components shall be removed and discarded.
  - Exception: Plumbing or fuel gas piping, fittings, fixtures, equipment, or components in areas not exposed to the corrosive effects of defective drywall shall be permitted to be left in place or reused.
- P. Section 112.5.1.1.3.5 Mechanical systems. All heating, air-conditioning, and ventilation system components, including but not limited to ductwork, air-handling units, furnaces, heat pumps, refrigerant lines, and thermostats and associated wiring, shall be removed and discarded.
  - Exception: Mechanical system components in areas not exposed to the corrosive effects of defective drywall shall be permitted to be left in place or reused.
- Q. Section 112.5.1.1.3.6 Cleaning. Following the removal of all materials and components in accordance with Sections

- 112.5.1.1.3.1 through 112.5.1.1.3.5, the building shall be thoroughly cleaned to remove any particulate matter and dust.
- R. Section 112.5.1.1.3.7 Airing out. Following cleaning in accordance with Section 112.5.1.1.3.6, the building shall be thoroughly aired out with the use of open windows and doors and fans.
- S. Section 112.5.1.1.3.8 Pre-rebuilding clearance testing. Following the steps outlined above for removal of all materials and components, cleaning and airing out, a pre-rebuilding clearance test shall be conducted with the use of copper or silver coupons and the methodology outlined in the April 2, 2010, joint report by the Consumer Products Safety Commission and the Department of Housing and Urban Development "Interim Remediation Guidance for Homes with Corrosion from Problem Drywall" or with the use of a copper probe and dosimeter. The clearance testing shall confirm that all airborne compounds associated with the defective drywall are at usual environmental background levels. The clearance testing report, certifying compliance, shall be submitted to the building official.

#### Notes:

- 1. Where the building is served by a well and prior to conducting clearance tests, all outlets in piping served by the well should be capped or otherwise plugged to prevent contamination of the air sample.
- 2. To prevent siphoning and evaporation of the trap seals, fixtures should be capped or otherwise plugged to prevent sewer gases from contaminating the air sample.
- T. Section 112.5.1.1.3.9 Testing agencies and personnel. Agencies and personnel performing pre-rebuilding or post-rebuilding clearance testing shall be independent of those responsible for all other remediation work and the agencies and personnel shall be appropriately certified or accredited by the Council of Engineering and Scientific Specialty Boards, the American Indoor Air Quality Council, or the World Safety Organization.

Exception: Testing agencies and personnel shall be accepted if certified by an RDP or if the agency employs an RDP to be in responsible charge of the work.

- U. Section 112.5.1.1.3.10 Rebuilding standards. The rebuilding of the building shall comply with the edition of the USBC that was in effect when the building was originally built.
- V. Section 112.5.1.1.3.11 Post-rebuilding clearance testing. A post-rebuilding clearance test prior to reoccupancy of the building or structure shall be conducted with the use of copper or silver coupons and the methodology outlined in the April 2, 2010, joint report by the <u>U.S.</u> Consumer Products Safety Commission and by the Department of Housing and Urban Development "Interim Remediation Guidance for Homes with Corrosion from Problem Drywall" or with the

use of a copper probe and dosimeter. The clearance testing shall confirm that all airborne compounds associated with the defective drywall are at usual environmental background levels. The clearance testing report certifying compliance shall be submitted to the building official.

#### Notes:

- 1. Where the building is served by a well and prior to conducting clearance tests, all outlets in piping served by the well should be capped or otherwise plugged to prevent contamination of the air sample.
- 2. To prevent siphoning and evaporation of the trap seals, fixtures should be capped or otherwise plugged to prevent sewer gases from contaminating the air sample.
- W. Section 112.5.1.1.4 Final approval by the building official. Once remediation has been completed in accordance with this section, a certificate or letter of approval shall be issued by the building official. The certificate or letter shall state that the remediation and rebuilding is deemed to comply with this code.
- X. Section 112.5.1.1.4.1 Approval of remediation occurring prior to these standards. The building official shall issue a certificate or letter of approval for remediation of defective drywall that occurred prior to the effective date of these standards provided post-rebuilding clearance testing has been performed in accordance with Section 112.5.1.1.3.11, by agencies and personnel complying with Section 112.5.1.1.3.9, and the clearance testing confirms that all airborne compounds associated with the defective drywall are at usual environmental background levels. The clearance testing report certifying compliance shall be submitted to the building official.

#### 13VAC5-63-130. Section 113 Inspections.

- A. Section 113.1 General. In accordance with § 36-105 of the Code of Virginia, any building or structure may be inspected at any time before completion, and shall not be deemed in compliance until approved by the inspecting authority. Where the construction cost is less than \$2,500, however, the inspection may, in the discretion of the inspecting authority, be waived. The building official shall coordinate all reports of inspections for compliance with the USBC, with inspections of fire and health officials delegated such authority, prior to the issuance of an occupancy permit.
- B. Section 113.1.1 Equipment required. Any ladder, scaffolding or test equipment necessary to conduct or witness a requested inspection shall be provided by the permit holder.
- C. Section 113.1.2 Duty to notify. When construction reaches a stage of completion that requires an inspection, the permit holder shall notify the building official.
- D. Section 113.1.3 Duty to inspect. Except as provided for in Section 113.7, the building official shall perform the

requested inspection in accordance with Section 113.6 when notified in accordance with Section 113.1.2.

- E. Section 113.2 Prerequisites. The building official may conduct a site inspection prior to issuing a permit. When conducting inspections pursuant to this code, all personnel shall carry proper credentials.
- F. Section 113.3 Minimum inspections. The following minimum inspections shall be conducted by the building official when applicable to the construction or permit:
  - 1. Inspection of footing excavations and reinforcement material for concrete footings prior to the placement of concrete.
  - 2. Inspection of foundation systems during phases of construction necessary to assure compliance with this code.
  - Inspection of preparatory work prior to the placement of concrete.
  - 4. Inspection of structural members and fasteners prior to concealment.
  - 5. Inspection of electrical, mechanical and plumbing materials, equipment and systems prior to concealment.
  - 6. Inspection of energy conservation material prior to concealment.
  - 7. Final inspection.
- G. 113.3.1 Equipment changes. Upon the replacement or new installation of any fuel-burning appliances or equipment in existing Group R-5 occupancies, an inspection or inspections shall be conducted to ensure that the connected vent or chimney systems comply with the following:
  - 1. Vent or chimney systems are sized in accordance with the IRC.
  - 2. Vent or chimney systems are clean, free of any obstruction or blockages, defects, or deterioration, and are in operable condition. Where not inspected by the local building department, persons performing such changes or installations shall certify to the building official that the requirements of Items 1 and 2 of this section are met.
- H. Section 113.4 Additional inspections. The building official may designate additional inspections and tests to be conducted during the construction of a building or structure and shall so notify the permit holder.
- I. Section 113.5 In-plant and factory inspections. When required by the provisions of this code, materials, equipment or assemblies shall be inspected at the point of manufacture or fabrication. The building official shall require the submittal of an evaluation report of such materials, equipment or assemblies. The evaluation report shall indicate the complete details of the assembly including a description of the assembly and its components, and describe the basis upon

- which the assembly is being evaluated. In addition, test results and other data as necessary for the building official to determine conformance with the USBC shall be submitted. For factory inspections, an identifying label or stamp permanently affixed to materials, equipment or assemblies indicating that a factory inspection has been made shall be acceptable instead of a written inspection report, provided the intent or meaning of such identifying label or stamp is properly substantiated.
- J. Section 113.6 Approval or notice of defective work. The building official shall either approve the work in writing or give written notice of defective work to the permit holder. Upon request of the permit holder, the notice shall reference the USBC section that serves as the basis for the defects and such defects shall be corrected and reinspected before any work proceeds that would conceal such defects. A record of all reports of inspections, tests, examinations, discrepancies and approvals issued shall be maintained by the building official and shall be communicated promptly in writing to the permit holder. Approval issued under this section may be revoked whenever it is discovered that such approval was issued in error or on the basis of incorrect information, or where there are repeated violations of the USBC. Notices issued pursuant to this section shall be permitted to be communicated electronically, provided the notice is reasonably calculated to get to the permit holder.
- K. Section 113.7 Approved inspection agencies. The building official may accept reports of inspections and tests from individuals or inspection agencies approved in accordance with the building official's written policy required by Section 113.7.1. The individual or inspection agency shall meet the qualifications and reliability requirements established by the written policy. Under circumstances where the building official is unable to make the inspection or test required by Section 113.3 or 113.4 within two working days of a request or an agreed upon date or if authorized for other circumstances in the building official's written policy, the building official shall accept reports for review. The building official shall approve the report from such approved individuals or agencies unless there is cause to reject it. Failure to approve a report shall be in writing within two working days of receiving it stating the reason for the rejection. Reports of inspections conducted by approved third-party inspectors or agencies shall be in writing, shall indicate if compliance with the applicable provisions of the USBC have been met and shall be certified by the individual inspector or by the responsible officer when the report is from an agency. Reports of inspections conducted for the purpose of verifying compliance with the requirements of the USBC for elevators, escalators, and related conveyances shall include the name and certification number of the elevator mechanic performing the tests witnessed by the third-party inspector or agency.

Exception: The licensed mechanical contractor installing the mechanical system shall be permitted to perform duct tests required by Section R403.3.3 of the IECC or Section N1103.3.3 of the IRC. The contractor shall have been trained on the equipment used to perform the test.

Note: Photographs, videotapes or other sources of pertinent data or information may be considered as constituting such reports and tests.

- L. Section 113.7.1 Third-party inspectors. Each building official charged with the enforcement of the USBC shall have a written policy establishing the minimum acceptable qualifications for third-party inspectors. The policy shall include the format and time frame required for submission of reports, any prequalification or preapproval requirements before conducting a third-party inspection and any other requirements and procedures established by the building official.
- M. Section 113.7.2 Qualifications. In determining thirdparty inspector qualifications, the building official may consider such items as DHCD inspector certification, other state or national certifications, state professional registrations, related experience, education and any other factors that would demonstrate competency and reliability to conduct inspections.
- N. Section 113.8 Final inspection. Upon completion of a building or structure and before the issuance of a certificate of occupancy construction for which a permit was issued, a final inspection shall be conducted to ensure that any defective work has been corrected and that all work complies with the USBC and has been approved, including any work associated with modifications under Section 106.3. The building official shall be permitted to require the electrical service to a building or structure to be energized prior to conducting the final inspection. The approval Approval of a the final inspection shall be permitted to serve as the new certificate of occupancy required by Section 116.1 in the case of additions or alterations to existing buildings or structures that already have a certificate of indicates that all work associated with the permit complies with this code and the permit is complete. Prior to occupancy or change of occupancy of a building or structure, a certificate of occupancy shall be issued in accordance with Section 116.

#### 13VAC5-63-150. Section 115 Violations.

A. Section 115.1 Violation a misdemeanor; civil penalty. In accordance with § 36-106 of the Code of Virginia, it shall be unlawful for any owner or any other person, firm or corporation, on or after the effective date of any code provisions, to violate any such provisions. Any locality may adopt an ordinance that establishes a uniform schedule of civil penalties for violations of specified provisions of the code that are not abated or remedied promptly after receipt of a notice of violation from the local enforcement officer.

Note: See the full text of § 36-106 of the Code of Virginia for additional requirements and criteria pertaining to legal action relative to violations of the code.

B. Section 115.2 Notice of violation. The building official shall issue a written notice of violation to the responsible party permit holder if any violations of this code or any directives or orders of the building official have not been corrected or complied with in within a reasonable time. The building official may also issue a notice of violation to other persons found to be responsible in addition to the permit holder. If the violations, directives, or orders involve work without a permit, the notice of violation shall be issued to the responsible party. The notice shall reference the code section upon which the notice is based and direct the correction of the violation or the compliance with such directive or order and specify a reasonable time period within which the corrections or compliance must occur. The notice shall be issued by either delivering a copy to the responsible party by mail to the last known address of the permit holder or responsible party, by delivering the notice in person or, by leaving it in the possession of any person in charge of the premises, or by posting the notice in a conspicuous place if the person in charge of the premises cannot be found. The notice of violation shall indicate the right of appeal by referencing the appeals section. When the owner of the building or structure, or the permit holder for the construction in question, or the tenants of such building or structure, are not the responsible party to whom the notice of violation is issued, then a copy of the notice shall also be delivered to the such owner, permit holder or tenants.

Note: A notice of unsafe building or structure for structures that become unsafe during the construction process are issued in accordance with Section 118.

- C. Section 115.2.1 Notice not to be issued under certain circumstances. When violations are discovered more than two years after the certificate of occupancy is issued or the date of initial occupancy, whichever occurred later, or more than two years after the approved final inspection for an alteration or renovation, a notice of violation shall only be issued upon advice from the legal counsel of the locality that action may be taken to compel correction of the violation. When compliance can no longer be compelled by prosecution under § 36-106 of the Code of Virginia, the building official, when requested by the building owner, shall document in writing the existence of the violation noting the edition of the USBC the violation is under.
- D. Section 115.3 Further action when violation not corrected. If the responsible party has not complied with the Upon failure to comply with the notice of violation, the building official may initiate legal proceedings by requesting the legal counsel of the locality to institute the appropriate legal proceedings to restrain, correct or abate the violation or to require the removal or termination of the use of the

building or structure involved. In cases where the locality so authorizes, the building official may issue or obtain a summons or warrant. Compliance with a notice of violation notwithstanding, the building official may request legal proceedings be instituted for prosecution when a person, firm or corporation is served with three or more notices of violation within one calendar year for failure to obtain a required construction permit prior to commencement of work subject to this code.

Note: See § 19.2-8 of the Code of Virginia concerning the statute of limitations for building code prosecutions.

- E. Section 115.4 Penalties and abatement. Penalties for violations of the USBC shall be as set out in § 36-106 of the Code of Virginia. The successful prosecution of a violation of the USBC shall not preclude the institution of appropriate legal action to require correction or abatement of a violation.
- F. Section 115.5 Transfer of ownership. In accordance with § 36-105 of the Code of Virginia, if the local building department has initiated an enforcement action against the owner of a building or structure and such owner subsequently transfers the ownership of the building or structure to an entity in which the owner holds an ownership interest greater than 50%, the pending enforcement action shall continue to be enforced against the owner.

## 13VAC5-63-160. Section 116 Certificates of occupancy.

A. Section 116.1 General; when to be issued. A certificate Prior to occupancy or change of occupancy indicating completion of the work for which a permit was issued shall be obtained prior to the occupancy of any building or structure, except as provided for in this section generally and as specifically provided for in Section 113.8 for additions or alterations. The certificate shall be issued after completion a certificate of occupancy shall be obtained in accordance with this section. The building official shall issue the certificate of occupancy within five working days after approval of the final inspection and when the building or structure is in or portion thereof is determined to be in compliance with this code and any pertinent laws or ordinances, or when otherwise entitled. The building official shall, however, issue a certificate of occupancy within five working days after being requested to do so, provided the building or structure meets all of the requirements for a certificate.

### **Exception** Exceptions:

- 1. A certificate of occupancy is not required for an accessory structure as defined in the IRC.
- <u>2. A new certificate of occupancy is not required for an addition to an existing Group R-5 building that already has a certificate of occupancy.</u>
- B. Section 116.1.1 Temporary certificate of occupancy. Upon the request of a permit holder, a temporary certificate of occupancy may be issued before the completion of the work

covered by a permit, provided that such portion or portions of a building of structure may be occupied safely prior to full completion of the building or structure without endangering life or public safety.

- C. Section 116.2 Contents of certificate. A certificate of occupancy shall specify the following:
  - 1. The edition of the USBC under which the permit is issued.
  - 2. The group classification and occupancy in accordance with the provisions of Chapter 3.
  - 3. The type of construction as defined in Chapter 6.
  - 4. If an automatic sprinkler system is provided and whether or not such system was required.
  - 5. Any special stipulations and conditions of the building permit and if any modifications were issued under the permit, there shall be a notation on the certificate that modifications were issued.
  - 6. Group R-5 occupancies complying with Section R320.2 of the IRC shall have a notation of compliance with that section on the certificate.
- D. Section 116.3 Suspension or revocation of certificate. A certificate of occupancy may be revoked or suspended whenever the building official discovers that such certificate was issued in error or on the basis of incorrect information, or where there are repeated violations of the USBC after the certificate has been issued or when requested by the code official under Section 105.7 106.6 of the VMC. The revocation or suspension shall be in writing and shall state the necessary corrections or conditions for the certificate to be reissued or reinstated in accordance with Section 116.3.1.
- E. Section 116.3.1 Reissuance or reinstatement of certificate of occupancy. When a certificate of occupancy has been revoked or suspended, it shall be reissued or reinstated upon correction of the specific condition or conditions cited as the cause of the revocation or suspension and the revocation or suspension of a certificate of occupancy shall not be used as justification for requiring a building or structure to be subject to a later edition of the code than that under which such building or structure was initially constructed.
- F. Section 116.4 Issuance of certificate for pre USBC buildings or structures When no certificate exists. When a building or structure was constructed prior to being subject to the initial edition of the USBC and the local building department does not have a certificate of occupancy for the a building or structure, the owner or owner's agent may submit a written request for a certificate to be created. The building official, after receipt of the request, shall issue a certificate provided a determination is made that there are no current violations of the VMC or the Virginia Statewide Fire Prevention Code (13VAC5-51) and the occupancy

classification of the building or structure has not changed. Such buildings and structures shall not be prevented from continued use.

Exception: When no certificate exists, but the local building department has records indicating that a certificate did exist, then the but does not have a copy of the certificate itself, then the building official may either verify in writing that a certificate did exist or issue a certificate based upon the records

# 13VAC5-63-190. Section 119 Appeals.

- A. Section 119.1 Establishment of appeals board. In accordance with § 36-105 of the Code of Virginia, there shall be established within each local building department a LBBCA. Whenever a county or a municipality does not have such a LBBCA, the local governing body shall enter into an agreement with the local governing body of another county or municipality or with some other agency, or a state agency approved by DHCD for such appeals resulting therefrom. Fees may be levied by the local governing body in order to defray the cost of such appeals. In addition, as an authorization in this code, separate LBBCAs may be established to hear appeals of different enforcement areas such as electrical, plumbing or mechanical requirements. Each such LBBCA shall comply with the requirements of this section. The locality is responsible for maintaining a duly constituted LBBCA prepared to hear appeals within the time limits established in this section. The LBBCA shall meet as necessary to assure a duly constituted board, appoint officers as necessary, and receive such training on the code as may be appropriate or necessary from staff of the locality.
- B. Section 119.2 Membership of board. The LBBCA shall consist of at least five members appointed by the locality for a specific term of office established by written policy. Alternate members may be appointed to serve in the absence of any regular members and as such, shall have the full power and authority of the regular members. Regular and alternate members may be reappointed. Written records of current membership, including a record of the current chairman and secretary shall be maintained in the office of the locality. In order to provide continuity, the terms of the members may be of different length so that less than half will expire in any one-year period.
- C. Section 119.3 Officers and qualifications of members. The LBBCA shall annually select one of its regular members to serve as chairman. When the chairman is not present at an appeal hearing, the members present shall select an acting chairman. The locality or the chief executive officer of the locality shall appoint a secretary to the LBBCA to maintain a detailed record of all proceedings. Members of the LBBCA shall be selected by the locality on the basis of their ability to render fair and competent decisions regarding application of the USBC and shall to the extent possible, represent different occupational or professional fields relating to the construction

- industry. At least one member should be an experienced builder; at least one member should be an RDP, and at least one member should be an experienced property manager. Employees or officials of the locality shall not serve as members of the LBBCA.
- D. Section 119.4 Conduct of members. No member shall hear an appeal in which that member has a conflict of interest in accordance with the State and Local Government Conflict of Interests Act (§ 2.2-3100 et seq. of the Code of Virginia). Members shall not discuss the substance of an appeal with any other party or their representatives prior to any hearings.
- E. Section 119.5 Right of appeal; filing of appeal application. Any person aggrieved by the local building department's application of the USBC or the refusal to grant a modification to the provisions of the USBC may appeal to the LBBCA. The applicant shall submit a written request for appeal to the LBBCA within 30 calendar days of the receipt of the decision being appealed. The application shall contain the name and address of the owner of the building or structure and in addition, the name and address of the person appealing, when the applicant is not the owner. A copy of the building official's decision shall be submitted along with the application for appeal and maintained as part of the record. The application shall be marked by the LBBCA to indicate the date received. Failure to submit an application for appeal within the time limit established by this section shall constitute acceptance of a building official's decision.

Note: To the extent that a decision of a building official pertains to amusement devices there may be a right of appeal under the VADR.

- F. Section 119.6 Meetings and postponements. The LBBCA shall meet within 30 calendar days after the date of receipt of the application for appeal, except that a period of up to 45 calendar days shall be permitted where the LBBCA has regularly scheduled monthly meetings. A longer time period shall be permitted if agreed to by all the parties involved in the appeal. A notice Notice indicating the time and place of the hearing shall be sent to the parties in writing to the addresses listed on the application if requested or by electronic means at least 14 calendar days prior to the date of the hearing, except that unless a lesser time period shall be permitted if is agreed to by all the parties involved in the appeal. When a quorum of the LBBCA is not present at a hearing to hear an appeal, any party involved in the appeal shall have the right to request a postponement of the hearing. The LBBCA shall reschedule the appeal within 30 calendar days of the postponement, except that a longer time period shall be permitted if agreed to by all the parties involved in the appeal.
- G. Section 119.7 Hearings and decision. All hearings before the LBBCA shall be open meetings and the appellant, the appellant's representative, the locality's representative and any person whose interests are affected by the building official's

decision in question shall be given an opportunity to be heard. The chairman shall have the power and duty to direct the hearing, rule upon the acceptance of evidence and oversee the record of all proceedings. The LBBCA shall have the power to uphold, reverse or modify the decision of the official by a concurring vote of a majority of those present. Decisions of the LBBCA shall be final if no further appeal is made. The decision of the LBBCA shall be explained in writing, signed by the chairman and retained as part of the record of the appeal. Copies of the written decision shall be sent to all parties by certified mail. In addition, the written decision shall contain the following wording:

"Any person who was a party to the appeal may appeal to the State Review Board by submitting an application to such Board within 21 calendar days upon receipt by certified mail of this decision. Application forms are available from the Office of the State Review Board, 600 East Main Street, Richmond, Virginia 23219, (804) 371-7150."

H. Section 119.8 Appeals to the State Review Board. After final determination by the LBBCA in an appeal, any person who was a party to the appeal may further appeal to the State Review Board. In accordance with § 36-98.2 of the Code of Virginia for state-owned buildings and structures, appeals by an involved state agency from the decision of the building official for state-owned buildings or structures shall be made directly to the State Review Board. The application for appeal shall be made to the State Review Board within 21 calendar days of the receipt of the decision to be appealed. Failure to submit an application within that time limit shall constitute an acceptance of the building official's decision. For appeals from a LBBCA, a copy of the building official's decision and the written decision of the LBBCA shall be submitted with the application for appeal to the State Review Board. Upon request by the office of the State Review Board, the LBBCA shall submit a copy of all pertinent information from the record of the appeal. In the case of appeals involving stateowned buildings or structures, the involved state agency shall submit a copy of the building official's decision and other relevant information with the application for appeal to the State Review Board. Procedures of the State Review Board are in accordance with Article 2 (§ 36-108 et seq.) of Chapter 6 of Title 36 of the Code of Virginia. Decisions of the State Review Board shall be final if no further appeal is made.

## 13VAC5-63-200. Chapter 2 Definitions.

A. Add the following definitions to Section 202 of the IBC to read:

Aboveground liquid fertilizer storage tank (ALFST). A device that contains an accumulation of liquid fertilizer (i) constructed of nonearthen materials, such as concrete, steel or plastic, that provide structural support; (ii) having a capacity of 100,000 gallons (378 500 (378,500 L) or greater; and (iii) the volume of which is more than 90%

above the surface of the ground. The term does not include any wastewater treatment or wastewater storage tank, utility or industry pollution control equipment.

Building regulations. Any law, rule, resolution, regulation, ordinance or code, general or special, or compilation thereof, heretofore or hereafter enacted or adopted by the Commonwealth or any county or municipality, including departments, boards, bureaus, commissions, or other agencies thereof, relating to construction, reconstruction, alteration, conversion, repair, maintenance, or use of structures and buildings and installation of equipment therein. The term does not include zoning ordinances or other land use controls that do not affect the manner of construction or materials to be used in the erection, alteration or repair of a building or structure.

Chemical fume hood. A ventilated enclosure designed to contain and exhaust fumes, gases, vapors, mists, and particulate matter generated within the hood.

Construction. The construction, reconstruction, alteration, repair, or conversion of buildings and structures.

Day-night average sound level (Ldn). A 24-hour energy average sound level expressed in dBA, with a 10 decibel penalty applied to noise occurring between 10 p.m. and 7 a m

DHCD. The Virginia Department of Housing and Community Development.

Emergency communication equipment. Emergency communication equipment, includes but is not limited to two-way radio communications, signal booster, bi-directional amplifiers, radiating cable systems, or internal multiple antenna, or a combination of the foregoing.

Emergency public safety personnel. Emergency public safety personnel includes firefighters, emergency medical personnel, law-enforcement officers, and other emergency public safety personnel routinely called upon to provide emergency assistance to members of the public in a wide variety of emergency situations, including but not limited to fires, medical emergencies, violent crimes, and terrorist attacks.

Emergency supplemental hardware. Any approved hardware used only for emergency events or drills to keep intruders from entering the room during an active shooter or hostile threat event or drill.

Equipment. Plumbing, heating, electrical, ventilating, air-conditioning and refrigeration equipment, elevators, dumbwaiters, escalators, and other mechanical additions or installations.

Farm building or structure. A building or structure not used for residential purposes, located on property where farming

operations take place, and used primarily for any of the following uses or combination thereof:

- 1. Storage, handling, production, display, sampling or sale of agricultural, horticultural, floricultural or silvicultural products produced in the farm.
- 2. Sheltering, raising, handling, processing or sale of agricultural animals or agricultural animal products.
- 3. Business or office uses relating to the farm operations.
- 4. Use of farm machinery or equipment or maintenance or storage of vehicles, machinery or equipment on the farm.
- 5. Storage or use of supplies and materials used on the farm.
- 6. Implementation of best management practices associated with farm operations.

Hospice facility. An institution, place, or building owned or operated by a hospice provider and licensed by the Virginia Department of Health as a hospice facility to provide room, board, and palliative and supportive medical and other health services to terminally ill patients and their families, including respite and symptom management, on a 24-hour basis to individuals requiring such care pursuant to the orders of a physician.

Industrialized building. A combination of one or more sections or modules, subject to state regulations and including the necessary electrical, plumbing, heating, ventilating and other service systems, manufactured offsite and transported to the point of use for installation or erection, with or without other specified components, to comprise a finished building. Manufactured homes shall not be considered industrialized buildings for the purpose of this code.

Laboratory suite. A fire-rated enclosed laboratory area that will provide one or more laboratory spaces, within a Group B educational occupancy, that are permitted to include ancillary uses such as offices, bathrooms, and corridors that are contiguous with the laboratory area and are constructed in accordance with Section 430.3.

LBBCA. Local board of building code appeals.

Liquid fertilizer. A fluid in which a fertilizer is in true solution. This term does not include anhydrous ammonia or a solution used in pollution control.

Local building department. The agency or agencies of any local governing body charged with the administration, supervision, or enforcement of this code, approval of construction documents, inspection of buildings or structures, or issuance of permits, licenses, certificates or similar documents.

Local governing body. The governing body of any city, county or town in this Commonwealth.

Locality. A city, county or town in this Commonwealth.

Manufactured home. A structure subject to federal regulation, which is transportable in one or more sections; is eight body feet or more in width and 40 body feet or more in length in the traveling mode, or is 320 or more square feet when erected on site; is built on a permanent chassis; is designed to be used as a single-family dwelling, with or without a permanent foundation, when connected to the required utilities; and includes the plumbing, heating, air-conditioning, and electrical systems contained in the structure.

Marina. Any installation, operating under public or private ownership, that has a structure providing dockage or moorage for boats, other than paddleboats or rowboats, and provides, through sale, rental, fee, or on a free basis, any equipment, supply, or service, including fuel, electricity, or water, for the convenience of the public or its lessees, renters, or users of its facilities. A dock or pier with or without slips that exclusively serves a single-family residential lot for the use of the owner of the lot is not a marina.

Night club. Any building in which the main use is a place of public assembly that provides exhibition, performance or other forms of entertainment; serves alcoholic beverages; and provides music and space for dancing.

Permissible fireworks. Any sparklers, fountains, Pharaoh's serpents, caps for pistols, or pinwheels commonly known as whirligigs or spinning jennies.

Short-term holding area. An area containing a holding cell or cells, or a holding room or rooms, including associated rooms or spaces where the occupants are restrained or detained by the use of security measures not under the occupant's control for less than 24 hours.

Skirting. A weather-resistant material used to enclose the space from the bottom of the manufactured home to grade.

Slip. A berth or space where a boat may be secured to a fixed or floating structure, including a dock, finger pier, boat lift, or mooring buoy.

Sound transmission class (STC) rating. A single number characterizing the sound reduction performance of a material tested in accordance with ASTM E90-90, "Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions."

State regulated care facility (SRCF). A building with an occupancy in Group R-2, R-3, R-4 or R-5 occupied by persons in the care of others where program oversight is provided by the Virginia Department of Social Services, the Virginia Department of Behavioral Health and

Developmental Services, the Virginia Department of Education or the Virginia Department of Juvenile Justice.

State Review Board. The Virginia State Building Code Technical Review Board as established under § 36-108 of the Code of Virginia.

Teaching and research laboratory. A building or portion of a building where hazardous materials are stored, used, and handled for the purpose of testing, analysis, teaching, research, or developmental activities on a nonproduction basis rather than in a manufacturing process.

Technical assistant. Any person employed by or under an extended contract to a local building department or local enforcing agency for enforcing the USBC, including but not limited to inspectors, plans reviewers, and permit technicians. For the purpose of this definition, an extended contract shall be a contract with an aggregate term of 18 months or longer.

Tenable environmental. An environment in which the products of combustion, including smoke, toxic gases, particulates, and heat, are limited or otherwise restricted in order to maintain the impact on occupants, including those in the area of fire origin, to a level that is not life threatening and permits the rescue of occupants for a limited time.

Unsafe building or structure. Any building or structure that is under construction and has not received a permanent certificate of occupancy, final inspection, or for which a permit was never issued or has expired and has been determined by the building official to be of faulty construction that is so damaged, decayed, dilapidated, structurally unsafe, or of such faulty construction or unstable foundation that partial or complete collapse is likely, or any unfinished construction that does not have a valid permit, or the permit has been revoked, and the condition of the unfinished construction presents an immediate serious and imminent threat to the life and safety of the occupants or the public.

VADR. The Virginia Amusement Device Regulations (13VAC5-31).

VCS. The Virginia Certification Standards (13VAC5-21).

Working day. A day other than Saturday, Sunday or a legal local, state or national holiday.

B. Change the following definitions in Section 202 of the IBC to read:

Addition. An extension or increase in floor area, number of stories, or height of a building or structure.

Ambulatory care facility. Buildings or portions thereof used to provide medical care on less than a 24-hour basis that are licensed by the Virginia Department of Health as outpatient surgical hospitals.

Automatic fire-extinguishing system. An approved system of devices and equipment that automatically detects a fire and discharges an approved fire-extinguishing agent onto or in the area of a fire and includes among other systems an automatic sprinkler system, unless otherwise expressly stated.

Building. A combination of materials, whether portable or fixed, having a roof to form a structure for the use or occupancy by persons, or property. The word "building" shall be construed as though followed by the words "or part or parts thereof" unless the context clearly requires a different meaning. "Building" shall not include roadway tunnels and bridges owned by the Virginia Department of Transportation, which shall be governed by construction and design standards approved by the Virginia Commonwealth Transportation Board.

For application of this code, each portion of a building that is completely separated from other portions by fire walls complying with Section 706 shall be considered as a separate building (see Section 503.1).

Change of occupancy. See Section 202 of the VEBC.

Clinic, outpatient. Buildings or portions thereof used to provide medical care on less than a 24-hour basis that are not licensed by the Virginia Department of Health as outpatient surgical hospitals.

Custodial care. Assistance with day-to-day living tasks, such as assistance with cooking, taking medication, bathing, using toilet facilities, and other tasks of daily living. In other than in hospice facilities, custodial care includes occupants that have the ability to respond to emergency situations and evacuate at a slower rate or who have mental and psychiatric complications, or both.

Existing structure. A structure (i) for which a legal building permit has been issued under any edition of the USBC, (ii) which that has been previously approved, or (iii) which that was built prior to the initial edition of the USBC. For application of provisions in flood hazard areas, an existing structure is any building or structure for which the start of construction commenced before the effective date of the community's first flood plain management code, ordinance, or standard.

Owner. The owner or owners of the freehold of the premises or lesser estate therein, a mortgagee or vendee in possession, assignee of rents, receiver, executor, trustee or lessee in control of a building or structure.

Registered Design Professional design professional (RDP). An architect or professional engineer, licensed to practice architecture or engineering, as defined under § 54.1-400 of the Code of Virginia.

Substantial damage. For the purpose of determining compliance with the flood provisions of this code, damage

of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred.

Substantial improvement. For the purpose of determining compliance with the flood provisions of this code, any improvement, including repair, reconstruction, rehabilitation, alteration, or addition, or other improvement of a building or structure or a portion thereof the cost of which equals or exceeds 50% of the market value of the building or structure before the improvement or repair is started. If the building or structure or portion thereof has sustained substantial damage, any improvements are considered substantial improvements regardless of the actual improvement performed. The term does not, however, include either:

- 1. Any project for improvement of a building or a structure or portion thereof required to correct existing health, sanitary, or safety code violations identified by the building official and that is the minimum necessary to assure safe living conditions; or
- 2. Any alteration of a historic structure, provided that the alteration will not preclude the building or structure's continued designation as a historic building or structure.

Swimming pool. A pool or spa as defined in the International Swimming Pool and Spa Code (ISPSC).

Structure. An assembly of materials forming a construction for occupancy or use including stadiums, gospel and circus tents, reviewing stands, platforms, stagings, observation towers, radio towers, water tanks, storage tanks (underground and aboveground), trestles, piers, wharves, swimming pools, amusement devices, storage bins, and other structures of this general nature but excluding water wells. The word "structure" shall be construed as though followed by the words "or part or parts thereof" unless the context clearly requires a different meaning. "Structure" shall not include roadway tunnels and bridges owned by the Virginia Department of Transportation, which shall be governed by construction and design standards approved by the Virginia Commonwealth Transportation Board.

Wall. A vertical element with a horizontal length-to-thickness ratio greater than three used to enclose space.

C. Delete the following definitions from Section 202 of the IBC:

Agricultural building

**Approved** 

Historic buildings

# 13VAC5-63-210. Chapter 3 Use and occupancy classification.

- A. Change Sections 303.1.1 and 303.1.2 of the IBC to read:
- 303.1.1 Small buildings and tenant spaces. A building or tenant space used for assembly purposes with an occupant load of less than 50 persons shall be permitted to be classified as a Group B occupancy.
- 303.1.2 Small assembly spaces. The following rooms and spaces shall be permitted to be classified as Group B occupancies or as part of the assembly occupancy:
  - 1. A room or space used for assembly purposes with an occupant load of less than 50 persons and ancillary to another occupancy.
  - 2. A room or space used for assembly purposes that is less than 750 square feet (70 m<sup>2</sup>) in area and ancillary to another occupancy.
- B. Change Section 303.6 of the IBC to read:

303.6 Assembly Group A-5. Assembly uses intended for participation in or viewing outdoor activities including, but not limited to:

Amusement park structures

Bleachers

Grandstands

Stadiums

Swimming pools

- C. Add Section 304.1.1 to the IBC to read:
- 304.1.1 Day support and day treatment facilities. Day support and day treatment facilities licensed by the Virginia Department of Behavioral Health and Developmental Services shall be permitted to be classified as Group B occupancies provided all of the following conditions are met:
  - 1. Participants who may require physical assistance from staff to respond to an emergency situation shall be located on the level of exit discharge.
  - 2. Any change in elevation within the exit access on the level of exit discharge shall be made by means of a ramp or sloped walkway.
  - 3. Where the facilities are located more than two stories above grade, an automatic sprinkler system shall be provided throughout the building in accordance with Section 903.3.1.1.
- D. Change exception Exception 14 of Section 307.1.1 of the IBC and add exception 15 Exception 18 to Section 307.1.1 of the IBC to read:

- 14. The storage of black powder, smokeless propellant and small arms primers in Groups M, R-3 and R-5 and special industrial explosive devices in Groups B, F, M and S, provided such storage conforms to the quantity limits and requirements prescribed in the IFC, as amended in Section 307.9.
- 45. 18. The storage of distilled spirits and wines in wooden barrels and casks. Distillation, blending, bottling, and other hazardous materials storage or processing shall be in separate control areas complying with Section 414.2.
- E. Change the "Flammable liquid, combination (IA, IB, IC)" row in Table 307.1(1), add a new "Permissible fireworks" row to Table 307.1(1) of the IBC, and add footnote "r" to Table 307.1(1) of the IBC to read:

Flammable liquid, combination (IA, IB, IC)	NA	H-2 or H-3	NA	120 <sup>d,e,h</sup>	NA	NA	120 <sup>d,h</sup>	NA	NA	30 <sup>d,h,r</sup>
Permissible fireworks	1.4G	Н-3	125 <sup>d,e,l</sup>	NA	NA	NA	NA	NA	NA	NA

- r. The tabular value for distilled spirit distillation and blending rooms is 120 gallons.
- F. Add Section 307.9 to the IBC to read:
- 307.9 Amendments. The following changes shall be made to the IFC for the use of Exception 14 in Section 307.1.1:
- 1. Change the following definition in Section 202 of the IFC to read:

Smokeless propellants. Solid propellants, commonly referred to as smokeless powders, or any propellants classified by DOTn as smokeless propellants in accordance with NA3178 (Smokeless Powder for Small Arms), used in small arms ammunition, firearms, cannons, rockets, propellant-actuated devices, and similar articles.

- 2. Change Section 314.1 of the IFC to read as follows:
  - 314.1 General. Indoor displays constructed within any building or structure shall comply with Sections 314.2 through 314.5.
- 3. Add new Section 314.5 to the IFC to read as follows:
  - 314.5 Smokeless powder and small arms primers. Vendors shall not store, display or sell smokeless powder or small arms primers during trade shows inside exhibition halls except as follows:
  - 1. The amount of smokeless powder each vender may store is limited to the storage arrangements and storage amounts established in Section 5606.5.2.1.
- 2. Smokeless powder shall remain in the manufacturer's original sealed container and the container shall remain sealed while inside the building. The repackaging of smokeless powder shall not be performed inside the building. Damaged containers shall not be repackaged inside the building and shall be immediately removed from the building in such manner to avoid spilling any powder.

- 3. There shall be at least 50 feet separation between vendors and 20 feet from any exit.
- 4. Small arms primers shall be displayed and stored in the manufacturer's original packaging and in accordance with the requirements of Section 5606.5.2.3.
- 4. Change Exception 4 and add Exceptions 10 and 11 to Section 5601.1 of the IFC as follows:
- 4. The possession, storage and use of not more than 15 pounds (6.75 kg) of commercially manufactured sporting black powder, 20 pounds (9 kg) of smokeless powder and any amount of small arms primers for hand loading of small arms ammunition for personal consumption.
- 10. The display of small arms primers in Group M when in the original manufacturer's packaging.
- 11. The possession, storage and use of not more than 50 pounds (23 kg) of commercially manufactured sporting black powder, 100 pounds (45 kg) of smokeless powder, and small arms primers for hand loading of small arms ammunition for personal consumption in Group R-3 or R-5, or 200 pounds (91 kg) of smokeless powder when stored in the manufacturer's original containers in detached Group U structures at least 10 feet (3048 mm) from inhabited buildings and are accessory to Group R-3 or R-5.
- 5. Change Section 5606.4 of the IFC to read as follows:
- 5606.4 Storage in residences. Propellants for personal use in quantities not exceeding 50 pounds (23 kg) of black powder or 100 pounds (45 kg) of smokeless powder shall be stored in original containers in occupancies limited to Group Groups R-3 and R-5 or 200 pounds (91 kg) of smokeless powder when stored in the manufacturer's original containers in detached Group U

structures at least 10 feet (3048 mm) from inhabited buildings and are accessory to Group R-3 or R-5. In other than Group R-3 or R-5, smokeless powder in quantities exceeding 20 pounds (9 kg) but not exceeding 50 pounds (23 kg) shall be kept in a wooden box or cabinet having walls of at least one inch (25 mm) nominal thickness or equivalent.

- 6. Delete Sections 5606.4.1 and 5606.4.2 of the IFC.
- 7. Change Section 5606.5.1.1 of the IFC to read as follows:

5606.5.1.1 Smokeless propellant. No more than 100 pounds (45 kg) of smokeless propellants in containers of eight pounds (3.6 kg) or less capacity shall be displayed in Group M occupancies.

- 8. Delete Section 5606.5.1.3 of the IFC.
- 9. Change Section 5606.5.2.1 of the IFC as follows:

5606.5.2.1 Smokeless propellant. Commercial stocks of smokeless propellants shall be stored as follows:

- 1. Quantities exceeding 20 pounds (9 kg), but not exceeding 100 pounds (45 kg) shall be stored in portable wooden boxes having walls of at least one inch (25 mm) nominal thickness or equivalent.
- 2. Quantities exceeding 100 pounds (45 kg), but not exceeding 800 pounds (363 kg), shall be stored in storage cabinets having walls at least one inch (25 mm) nominal thickness or equivalent. Not more than 400 pounds (182 kg) shall be stored in any one cabinet, and cabinets shall be separated by a distance of at least 25 feet (7620 mm) or by a fire partition having a fire-resistance rating of at least one hour.
- 3. Storage of quantities exceeding 800 pounds (363 kg), but not exceeding 5,000 pounds (2270 kg) in a building shall comply with all of the following:
- 3.1. The <u>warehouse or</u> storage <u>room</u> is <del>inaccessible</del> <u>not</u> <u>open</u> to unauthorized personnel.
- 3.2. Smokeless propellant shall be stored in nonportable storage cabinets having wood walls at least one inch (25 mm) nominal thickness or equivalent and having shelves with no more than 3 feet (914 mm) of vertical separation between shelves.
- 3.3. No more than 400 pounds (182 kg) is stored in any one cabinet.
- 3.4. Cabinets shall be located against walls with at least 40 feet (12 192 (12,192 mm) between cabinets. The minimum required separation between cabinets may be reduced to 20 feet (6096 mm) provided that barricades twice the height of the cabinets are attached to the wall, midway between each cabinet. The barricades must extend a minimum of 10 feet (3048 mm) outward, be firmly attached to the wall, and be constructed of steel

not less than 0.25 inch thick (6.4 mm), 2-inch (51 mm) nominal thickness wood, brick, or concrete block.

- 3.5. Smokeless propellant shall be separated from materials classified as combustible liquids, flammable liquids, flammable solids, or oxidizing materials by a distance of 25 feet (7620 mm) or by a fire partition having a fire-resistance rating of 1 hour.
- 3.6. The building shall be equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.
- 4. Smokeless propellants not stored according to Item 1, 2, or 3 above shall be stored in a Type 2 or 4 magazine in accordance with Section 5604 and NFPA 495.

G. Add the following to the list of terms in Section 308.2 of the IBC:

#### Hospice facility

H. G. Change Section 308.3 308.2 of the IBC to read:

308.3 308.2 Institutional Group I-1. This occupancy shall include buildings, structures or portions thereof for more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised environment and receive custodial care. Buildings of Group I-1, other than assisted living facilities licensed by the Virginia Department of Social Services, shall be classified as the occupancy condition indicated in Section 308.3.1 308.2.1. Assisted living facilities licensed by the Virginia Department of Social Services shall be classified as one of the occupancy conditions indicated in Section 308.3.1 308.2.1 or 308.3.2 308.2.2. This group shall include, but not be limited to, the following:

Alcohol and drug centers

Assisted living facilities

Congregate care facilities

Group homes

Halfway houses

Residential board and care facilities

Social rehabilitation facilities

**I.** <u>H.</u> Change Sections <u>308.3.1</u> <u>308.2.1</u> and <u>308.3.2</u> <u>308.2.2</u> of the IBC to read:

308.3.1 308.2.1 Condition 1. This occupancy condition shall include buildings in which all persons receiving custodial care who, without any assistance, are capable of responding to an emergency situation to complete building evacuation. Not more than five of the residents may require physical assistance from staff to respond to an emergency situation when all residents who may require the physical assistance reside on a single level of exit discharge.

308.3.2 308.2.2 Condition 2. This occupancy condition shall include buildings in which there are persons receiving custodial care who require assistance by not more than one staff member while responding to an emergency situation to complete building evacuation. Five of the residents may require physical assistance from more than one staff member to respond to an emergency.

J. I. Change Section 308.4 308.3 of the IBC to read:

308.4 308.3 Group I-2. This occupancy shall include buildings and structures used for medical care on a 24-hour basis for more than five persons who are incapable of self-preservation. This group shall include, but not be limited to, the following:

Convalescent facilities

Detoxification facilities

Foster care facilities

Hospice facilities

Hospitals

Nursing homes

Psychiatric hospitals

Exception: Hospice facilities occupied by 16 or less occupants, excluding staff, are permitted to be classified as Group R-4.

K. J. Add an exception to Section 308.6 308.5 of the IBC to read:

Exception: Family day homes under Section 310.9 310.8.

L. K. Change Section 310.3 310.2 of the IBC to read:

310.3 310.2 Residential Group R-1. Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including:

Boarding houses (transient) with more than 10 occupants

Congregate living facilities (transient) with more than 10 occupants

Hotels (transient)

Motels (transient)

# **Exceptions:**

1. Nonproprietor occupied bed and breakfast and other transient boarding facilities not more than three stories above grade plane in height with a maximum of 10 occupants total are permitted to be classified as either Group R-3 or R-5 provided that smoke alarms are installed in compliance with Section 907.2.11.2 907.2.10.2 for Group R-3 or Section R314 of the IRC for Group R-5.

2. Proprietor occupied bed and breakfast and other transient boarding facilities not more than three stories above grade plane in height, that are also occupied as the residence of the proprietor, with a maximum of five guest room sleeping units provided for the transient occupants are permitted to be classified as either Group R-3 or R-5 provided that smoke alarms are installed in compliance with Section 907.2.11.2 907.2.10.2 for Group R-3 or Section R314 of the IRC for Group R-5.

M. L. Change Section 310.6 310.5 of the IBC to read:

310.6 310.5 Residential Group R-4. This occupancy shall include buildings, structures or portions thereof for more than five but not more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised environment and receive custodial care. Buildings of Group R-4, other than assisted living facilities licensed by the Virginia Department of Social Services, shall be classified as the occupancy condition indicated in Section 310.6.1 310.5.1. Assisted living facilities licensed by the Virginia Department of Social Services shall be classified as one of the occupancy conditions indicated in Section 310.6.1 310.5.1 or 310.6.2 310.5.2. This group shall include, but not be limited to the following:

Alcohol and drug centers

Assisted living facilities

Congregate care facilities

Group homes

Halfway houses

Residential board and care facilities

Social rehabilitation facilities

This occupancy shall also include hospice facilities with not more than 16 occupants, excluding staff.

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code.

## **Exceptions:**

- 1. Group homes licensed by the Virginia Department of Behavioral Health and Developmental Services that house no more than eight persons with one or more resident counselors shall be classified as Group R-2, R-3, R-4 or R-5. Not more than five of the persons may require physical assistance from staff to respond to an emergency situation.
- 2. In Group R-4 occupancies classified as the occupancy condition indicated in Section 310.6.1 310.5.1, other than in hospice facilities, not more than five of the residents may require physical assistance from staff to respond to an emergency situation when all residents who may

require the physical assistance from staff reside on a single level of exit discharge and other than using a ramp, a change of elevation using steps or stairs is not within the path of egress to an exit door.

- 3. Assisted living facilities licensed by the Virginia Department of Social Services that house no more than eight persons, with one or more resident counselors, and all of the residents are capable of responding to an emergency situation without physical assistance from staff, may be classified as Group R-2, R-3 or R-5.
- 4. Assisted living facilities licensed by the Virginia Department of Social Services that house no more than eight persons, with one or more resident counselors, may be classified as Group R-5 when in compliance with all of the following:
- 4.1. The building is protected by an automatic sprinkler system installed in accordance with Section 903.3 or Section P2904 of the IRC.
- 4.2. Not more than five of the residents may require physical assistance from staff to respond to an emergency situation.
- 4.3. All residents who may require physical assistance from staff to respond to an emergency situation reside on a single level of exit discharge and other than using a ramp, a change in elevation using steps or stairs is not within the path of egress to an exit door.
- 5. Hospice facilities with five or fewer occupants are permitted to comply with the IRC provided the building is protected by an automatic sprinkler system in accordance with IRC Section P2904 or IBC Section 903.3.

# N. M. Change Sections <u>310.6.1</u> <u>310.5.1</u> and <u>310.6.2</u> <u>310.5.2</u> to the IBC to read:

310.6.1 310.5.1 Condition 1. This occupancy condition shall include buildings in which all persons receiving custodial care who, without any assistance, are capable of responding to an emergency situation to complete building evacuation and hospice facilities.

310.6.2 310.5.2 Condition 2. This occupancy condition shall include buildings in which there are persons receiving custodial care who require assistance by not more than one staff member while responding to an emergency situation to complete building evacuation.

# O. N. Add Section 310.7 310.6 to the IBC to read:

310.7 310.6 Residential Group R-5. Residential occupancies in detached single-family and two-family dwellings, townhouses and accessory structures within the scope of the IRC.

### P. O. Add Section 310.8 310.7 to the IBC to read:

310.8 Group R-5. The construction of Group R-5 structures shall comply with the IRC. The amendments to the IRC set out in Section 310.11 310.10 shall be made to the IRC for its use as part of this code. In addition, all references to the IRC in the IBC shall be considered to be references to this section.

## Q. P. Add Section 310.8.1 310.7.1 to the IBC to read:

310.8.1 310.7.1 Additional requirements. Methods of construction, materials, systems, equipment or components for Group R-5 structures not addressed by prescriptive or performance provisions of the IRC shall comply with applicable IBC requirements.

# R. Q. Add Section 310.9 310.8 to the IBC to read:

310.9 310.8 Family day homes. Family day homes where program oversight is provided by the Virginia Department of Social Services shall be classified as Group R-2, R-3 or R-5.

Note: Family day homes may generally care for up to 12 children. See the DHCD Related Laws Package for additional information.

### S. R. Add Section 310.10 310.9 to the IBC to read:

310.10 310.9 Radon-resistant construction in Groups R-3 and R-4 structures. Groups R-3 and R-4 structures shall be subject to the radon-resistant construction requirements in Appendix F of the IRC in localities enforcing such requirements pursuant to Section R324 of the IRC.

### T. S. Add Section 310.11 310.10 to the IBC to read:

310.11 310.10 Amendments to the IRC. The following changes shall be made to the IRC for its use as part of this code:

#### 1. Add the following definitions to read:

Living area. Space within a dwelling unit utilized for living and entertainment, including family rooms, great rooms, living rooms, dens, media rooms, and similar spaces.

Nonpotable fixtures and outlets. Fixtures and outlets that are not dependent on potable water for the safe operation to perform their intended use. Such fixtures and outlets may include, but are not limited to water closets, urinals, irrigation, mechanical equipment, and hose connections to perform operations, such as vehicle washing and lawn maintenance.

Nonpotable water systems. Water systems for the collection, treatment, storage, distribution, and use or reuse of nonpotable water. Nonpotable systems include reclaimed water, rainwater, and gray water systems.

Rainwater. Natural precipitation, including snow melt, from roof surfaces only.

Stormwater. Precipitation that is discharged across the land surface or through conveyances to one or more waterways and that may include stormwater runoff, snow melt runoff, and surface runoff and drainage.

2. Change the following definitions to read:

Attic, habitable. A finished or unfinished area, not considered a story, complying with all of the following requirements:

- 1. The occupiable floor area is at least 70 square feet (17 m²), in accordance with Section R304,
- 2. The occupiable floor area has a ceiling height in accordance with Section R305, and
- 3. The occupiable space is enclosed by the roof assembly above, knee walls (if applicable) on the sides and the floor-ceiling assembly below.

Habitable attics greater than two-thirds of the area of the story below or over 400 square feet (37.16 m<sup>2</sup>) shall not be permitted in dwellings or townhouses that are three stories above grade plane in height.

Gray water. Water discharged from lavatories, bathtubs, showers, clothes washers, and laundry trays.

3. Change Section R301.2.1 to read:

R301.2.1 Wind design criteria. Buildings and portions thereof shall be constructed in accordance with the wind provisions of this code using the ultimate design wind speed in Table R301.2(1) as determined from Figure R301.2(4)A R301.2(5)A. The structural provisions of this code for wind loads are not permitted where wind design is required as specified in Section R301.2.1.1. Where different construction methods and structural materials are used for various portions of a building, the applicable requirements of this section for each portion shall apply. Where not otherwise specified, the wind loads listed in Table R301.2(2) adjusted for height and exposure using Table R301.2(3) shall be used to determine design load performance requirements for wall coverings, curtain walls, roof coverings, exterior windows, skylights, garage doors, and exterior doors. Asphalt shingles shall be designed for wind speeds in accordance with Section R905.2.4. A continuous load path shall be provided to transmit the applicable uplift forces in Section R802.11.1 from the roof assembly to the foundation. Wind speeds for localities in special wind regions, near mountainous terrain, and near gorges shall be based on elevation. Areas at 4,000 feet in elevation or higher shall use the nominal design wind speed of 110 mph (48.4 m/s) and areas under 4,000 feet in elevation shall use nominal design wind speed of 90 mph (39.6 m/s). Gorge areas shall be based on the highest recorded speed per locality or in accordance with local jurisdiction requirements determined in accordance with Section 26.5.1 of ASCE 7.

- 4. Add Exceptions 6 and 7 to Section R302.1 to read:
  - 6. Decks and open porches.
  - 7. Walls of dwellings and accessory structures located on lots in subdivisions or zoning districts where building setbacks established by local ordinance prohibit the walls of the structures on adjacent lots from being closer than 10 feet (3048 mm) to each other at any point along the exterior walls.
- 5. Add the following sentence to the end of Section R302.3 to read:

Dwelling unit separation wall assemblies that are constructed on a lot line shall be constructed as required in Section R302.2 for townhouses.

6. Change Section R302.5.1 to read and delete Section R302.13 in its entirety:

R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1-3/8 inches (35 mm) thickness, solid or honeycomb-core steel doors not less than 1-3/8 inches (35 mm) thick, or 20-minute fire-rated doors.

- 7. Delete Section R302.13 in its entirety.
- 8. Change Section R303.4 to read:

R303.4 Mechanical ventilation. Dwelling units shall be provided with mechanical ventilation in accordance with Section <u>M1507 M1505</u>.

8. 9. Add an exception to Section R303.10 to read:

Exception: Seasonal structures not used as a primary residence for more than 90 days per year, unless rented, leased or let on terms expressed or implied to furnish heat, shall not be required to comply with this section.

9. 10. Add Section R303.10.1 to read:

R303.10.1 Nonowner occupied required heating. Every dwelling unit or portion thereof which is to be rented, leased or let on terms either expressed or implied to furnish heat to the occupants thereof shall be provided with facilities in accordance with Section R303.9 R303.10 during the period from October 15 to May 1.

10. 11. Add Section R303.11 to read:

R303.11 Insect screens. Every door, window and other outside opening required for ventilation purposes shall be supplied with approved tightly fitted screens of not less

than 16 mesh per inch (16 mesh per 25 mm) and every screen door used for insect control shall have a self-closing device.

### 11. 12. Add Section R306.5 to read:

R306.5 Water supply sources and sewage disposal systems. The water and drainage system of any building or premises where plumbing fixtures are installed shall be connected to a public or private water supply and a public or private sewer system. As provided for in Section 103.5 of Part I of the Virginia Uniform Statewide Building Code (13VAC5-63), for functional design, water supply sources and sewage disposal systems are regulated and approved by the Virginia Department of Health and the Virginia Department of Environmental Quality.

Note: See also the Memorandums of Agreement in the "Related Laws Package," which is available from the Virginia Department of Housing and Community Development.

## 12. 13. Change Section R308.4.5 to read:

R308.4.5 Glazing and wet surfaces. Glazing in walls, enclosures, or fences containing or facing hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers, and indoor or outdoor swimming pools shall be considered a hazardous location if located less than 60 inches (1524 mm) measured horizontally, in a straight line, from the water's edge and the bottom exposed edge of the glazing is less than 60 inches (1524 mm) measured vertically above any standing or walking surface. This shall apply to single glazing and each pane in multiple glazing.

# 13. 14. Change Section R310.1 to read:

R310.1 Emergency escape and rescue opening required. Basements, habitable attics, and every sleeping room designated on the construction documents shall have not less than one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, an emergency egress and rescue opening shall be required in each sleeping room. Emergency escape and rescue openings shall open directly into a public way, or to a yard or court that opens to a public way.

# **Exceptions:**

- 1. Dwelling units equipped throughout with an approved automatic sprinkler system installed in accordance with NFPA 13, 13R, or 13D or Section P2904.
- 2. Storm shelters and basements used only to house mechanical equipment and not exceeding total floor area of 200 square feet (18.58 m<sup>2</sup>).

### 14. 15. Change Section R310.2.1 to read:

R310.2.1 Minimum opening area. Emergency and escape rescue openings shall have a net clear opening of not less than 5.7 square feet (0.530 m²). The net clear opening dimensions required by this section shall be obtained by the normal operation of the emergency escape and rescue opening from the inside, including the tilting or removal of the sash as the normal operation. The net clear height opening shall be not less than 24 inches (610 mm), and the net clear width shall be not less than 20 inches (508 mm).

Exception: Grade floor or below grade openings shall have a net clear opening of not less than 5 square feet  $(0.465 \text{ m}^2)$ .

45. 16. Change the exception in to Section R311.3.1 to read:

Exception: The landing or floor on the exterior side shall not be more than 8-1/4 inches (210 mm) below the top of the threshold provided the door does not swing over the landing or floor.

### 16. 17. Change Section R311.3.2 to read:

R311.3.2 Floor elevations for other exterior doors. Doors other than the required egress door shall be provided with landings or floors not more than 8-1/4 inches (210 mm) below the top of the threshold.

Exception: A top landing is not required where a stairway of not more than two risers is located on the exterior side of the door, if that door does not swing over the stairway.

# 18. Change Section R311.7.5.1 to read:

R311.7.5.1 Risers. The riser height shall be not more than 8-1/4 inches (210 mm). The riser shall be measured vertically between the leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). Risers shall be vertical or sloped from the underside of the nosing of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. Open risers are permitted provided that the openings located more than 30 inches (763 mm), as measured vertically, to the floor or grade below do not permit the passage of a 4-inch-diameter (102 mm) sphere.

#### **Exceptions:**

- 1. The opening between adjacent treads is not limited on spiral stairways.
- 2. The riser height of spiral stairways shall be in accordance with Section R311.7.10.1.

17. 19. Change Section R311.7.5.2 to read:

R311.7.5.2 Treads. The tread depth shall be not less than 9 inches (229 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm).

18. 20. Change Section R311.7.7 to read:

R311.7.7 Stairway walking surface. The walking surface of treads and landings of stairways shall be level or sloped no steeper than one unit vertical in 48 units horizontal (2.0% slope).

19. 21. Change Section R312.2.1 to read:

R312.2.1 Window sills. In dwelling units, where the top of the sill of an operable window opening is located less than 18 inches (457 mm) above the finished floor and greater than 72 inches (1829 mm) above the finished grade or other surface below on the exterior of the building, the operable window shall comply with one of the following:

- 1. Operable windows with openings that will not allow a 4-inch-diameter (102 mm) sphere to pass through the opening where the opening is in its largest opened position.
- 2. Operable windows that are provided with window fall prevention devices that comply with ASTM F 2090.
- 3. Operable windows that are provided with window opening control devices that comply with Section R312.2.2.
- 20. 22. Replace Section R313 with the following:

Section R313.

Automatic Fire Sprinkler Systems.

R313.1 Townhouse automatic fire sprinkler systems. Notwithstanding the requirements of Section 103.3, where installed, an automatic residential fire sprinkler system for townhouses shall be designed and installed in accordance with NFPA 13D or Section P2904.

Exception: An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing townhouses that do not have an automatic residential fire sprinkler system installed.

R313.2 One-family and two-family dwellings automatic fire sprinkler systems. Notwithstanding the requirements of Section 103.3, where installed, an automatic residential fire sprinkler system shall be designed and installed in accordance with NFPA 13D or Section P2904.

Exception: An automatic residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with an automatic residential fire sprinkler system.

21. 23. Delete Section R314.2.2.

22. 24. Change Section R314.7.3 to read:

R314.7.3 Permanent fixture. Where a household fire alarm system is installed, it shall become a permanent fixture of the dwelling unit.

23. 25. Change Section R315.1.1 to read:

R315.1.1 Listings. Carbon monoxide alarms shall be hard wired, plug-in or battery type; listed as complying with UL 2034; and installed in accordance with this code and the manufacturer's installation instructions. Combination carbon monoxide and smoke alarms shall be listed in accordance with UL 2034 and UL 217.

24. 26. Change Section R315.2 to read:

R315.2 Where required. Carbon monoxide alarms shall be provided in accordance with this section.

25. 27. Delete Section R315.2.2.

26. 28. Delete Section R315.5 R315.6.

27. 29. Change Section R315.6.3 R315.7.3 to read:

R315.6.3 R315.7.3 Permanent fixture. Where a household carbon monoxide detection system is installed, it shall become a permanent fixture of the occupancy.

28. 30. Add Section R320.2 to read:

R320.2 Universal design features for accessibility in dwellings. Dwellings constructed under the IRC not subject to Section R320.1 may comply with Section 1109.16 of the USBC and be approved by the local building department as dwellings containing universal design features for accessibility.

29. 31. Add Section R326.1.1 to read:

R326.1.1 Changes to the ISPSC. The following change shall be made to the ISPSC:

1. Change Section 305.2.9 to read:

305.2.9 Equipment clear zone. Equipment, including pool equipment such as pumps, filters, and heaters shall not be installed within 36 inches (914 mm) of the exterior of the barrier when located on the same property.

30. 32. Add Section R327 R328 Radon-Resistant Construction.

31. 33. Add Section R327.1 R328.1 to read:

R327.1 R328.1 Local enforcement of radon requirements. Following official action under Article 7

(§ 15.2-2280 et seq.) of Chapter 22 of Title 15.2 of the Code of Virginia by a locality in areas of high radon potential, as indicated by Zone 1 on the U.S. EPA Map of Radon Zones (IRC Figure AF101), such locality shall enforce the provisions contained in Appendix F.

Exception: Buildings or portions thereof with crawl space foundations which are ventilated to the exterior, shall not be required to provide radon-resistant construction.

- 32. 34. Add Section R328 R329 Patio Covers.
- 33. 35. Add Section R328.1 R329.1 to read:

R328.1 R329.1 Use of Appendix H for patio covers. Patio covers shall comply with the provisions in Appendix H.

- 34. 36. Add Section R329 R330 Sound Transmission.
- 35. 37. Add Section R329.1 R330.1 to read:

R329.1 R330.1 Sound transmission between dwelling units. Construction assemblies separating dwelling units shall provide airborne sound insulation as required in Appendix K.

36. 38. Add Section R329.2 R330.2 to read:

R329.2 R330.2 Airport noise attenuation. This section applies to the construction of the exterior envelope of detached one-family and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories high with separate means of egress within airport noise zones when enforced by a locality pursuant to § 15.2-2295 of the Code of Virginia. The exterior envelope of such structures shall comply with Section 1207.4 1206.4 of the state amendments to the IBC.

- 37. 39. Add Section R330 R331 Fire Extinguishers.
- 38. 40. Add Section R330.1 R331.1 to read:

R330.1 R331.1 Kitchen areas. Other than where the dwelling is equipped with an approved sprinkler system in accordance with Section R313, a fire extinguisher having a rating of 2-A:10-B:C or an approved equivalent type of fire extinguisher shall be installed in the kitchen area.

- 39. 41. Add Section R331 R332 Interior Passage.
- 40. 42. Add Sections R331.1 R332.1 through R331.6 R332.6 to read:

R331.1 R332.1 General. This section applies to new dwelling units that have both a kitchen and a living area on the same floor level as the egress door required by Section R311.2. This section is not applicable to additions, reconstruction, alteration, or repair.

R331.2 R332.2 Kitchen. One interior passage route from the egress door to the kitchen shall comply with R331.6 R332.6.

R331.3 R332.3 Living area. One interior passage route from the egress door to at least one living area shall comply with R331.6 R332.6.

R331.4 R332.4 Bedroom. Where the dwelling unit has a bedroom on the same floor level as the egress door, one interior passage route from the egress door to at least one bedroom shall comply with R331.6 R332.6.

R331.5 R332.5 Bathroom. Where a dwelling unit has a bathroom on the same floor level as the egress door, and the bathroom contains a water closet, lavatory, and bathtub or shower, one interior passage route from the egress door to at least one bathroom shall comply with R331.6 R332.6. Bathroom fixture clearances shall comply with R307 and access to fixtures is not required to comply with R331.6 R332.6.

R331.6 R332.6 Opening widths. Opening widths along the interior passage route required by this section shall comply with the following:

- 1. Cased openings shall provide a minimum 34 inch (864 mm) clear width.
- 2. Doors shall be a nominal 34 inch (864 mm) minimum width. Double doors are permitted to be used to meet this requirement.
- 43. Add Section R333 Tiny Houses.
- 44. Add Section R333.1 to read:
  - R333.1 General. Appendix Q may be used as an alternative to the requirements of this code where a dwelling is 400 square feet (37 m<sup>2</sup>) or less in floor area.
- 41. 45. Change Section R401.3 to read:

R401.3 Drainage. Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection that does not create a hazard to the dwelling unit. Lots shall be graded to drain surface water away from foundation walls. The grade shall fall a minimum of six inches (152 mm) within the first 10 feet (3048 mm).

Exception: Where lot lines, walls, slopes or other physical barriers prohibit six inches (152 mm) of fall within 10 feet (3048 mm), drains or swales shall be constructed to ensure drainage away from the structure. Impervious surfaces within 10 feet (3048 mm) of the building foundation shall be sloped a minimum of 2.0% 1.0% away from the building.

42. 46. Add the following exceptions to Section R403.1 to read:

**Exceptions:** 

- 1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, not exceeding 256 square feet (23.7824 m²) of building area, provided all of the following conditions are met:
- 1.1. The building eave height is 10 feet or less.
- 1.2. The maximum height from the finished floor level to grade does not exceed 18 inches.
- 1.3. The supporting structural elements in direct contact with the ground shall be placed level on firm soil and when such elements are wood they shall be approved pressure preservative treated suitable for ground contact use.
- 1.4. The structure is anchored to withstand wind loads as required by this code.
- 1.5. The structure shall be of light-frame construction whose vertical and horizontal structural elements are primarily formed by a system of repetitive wood or light gauge steel framing members, with walls and roof of light weight material, not slate, tile, brick or masonry.
- 2. Footings are not required for ramps serving dwelling units in Group Groups R-3 and R-5 occupancies where the height of the entrance is no more than 30 inches (762 mm) above grade.

#### 47. Change Section R403.1.6 to read:

R403.1.6 Foundation anchorage. Wood sill plates and wood walls supported directly on continuous foundations shall be anchored to the foundation in accordance with this section.

Cold-formed steel framing shall be anchored directly to the foundation or fastened to wood sill plates in accordance with Section R505.3.1 or R603.3.1, as applicable. Wood sill plates supporting cold-formed steel framing shall be anchored to the foundation in accordance with this section.

Wood foundation plates or sills shall be bolted or anchored to the foundation with not less than 1/2-inchdiameter (12.7 mm) steel bolts or approved anchors spaced to provide equivalent anchorage as the steel bolts. Bolts shall be embedded not less than 7 inches (178 mm) into concrete or grouted cells of concrete masonry units. The bolts shall be located in the middle third of the width of the plate. Bolts shall be spaced not more than 6 feet (1829 mm) on center and there shall be not less than two bolts or anchor straps per piece with one bolt or anchor strap located not more than 12 inches (305 mm) or less than 4 inches (102 mm) from each end of each piece. A properly sized nut and washer shall be tightened on each bolt to the plate. Interior bearing wall sole plates on monolithic slab foundation that are not part of a braced wall panel shall be positively anchored with approved fasteners. Sill plates and sole plates shall be protected against decay and termites where required by Sections R317 and R318.

# **Exceptions:**

- 1. Walls 24 inches (610 mm) total length or shorter connecting offset braced wall panels shall be anchored to the foundation with not fewer than one anchor bolt located in the center third of the plate section and shall be attached to adjacent braced wall panels at corners as shown in Item 9 of Table R602.3(1).
- 2. Connection of walls 12 inches (305 mm) total length or shorter connecting offset braced wall panels to the foundation without anchor bolts shall be permitted. The wall shall be attached to adjacent braced wall panels at corners as shown in Item 9 of Table R602.3(1).
- 43. 48. Delete Section R404.1.9.2.
- 49. Change Sections R408.1, R408.2, and R408.3 to read:
  - R408.1 Moisture control. The under-floor space between the bottom of the floor joists and the earth under any building (except space occupied by a basement) shall comply with Section R408.2 or R408.3.
- R408.2 Openings for under-floor ventilation. Ventilation openings through foundation or exterior walls surrounding the under-floor space shall be provided in accordance with this section. The minimum net area of ventilation openings shall be not less than 1 square foot (0.0929 m²) for each 150 square feet (14 m²) of under-floor area. One ventilation opening shall be within 3 feet (915 mm) of each external corner of the under-floor space. Ventilation openings shall be covered for their height and width with any of the following materials provided that the least dimension of the covering shall not exceed 1/4 inch (6.4 mm), and operational louvers are permitted:
- 1. Perforated sheet metal plates not less than 0.070 inch (1.8 mm) thick.
- 2. Expanded sheet metal plates not less than 0.047 inch (1.2 mm) thick.
- 3. Cast-iron grill or grating.
- 4. Extruded load-bearing brick vents.
- 5. Hardware cloth of 0.035 inch (0.89 mm) wire or heavier.
- 6. Corrosion-resistant wire mesh, with the least dimension being 1/8 inch (3.2 mm) thick.

#### **Exceptions:**

1. The total area of ventilation openings shall be permitted to be reduced to 1/1,500 of the under-floor area

where the ground surface is covered with an approved Class I vapor retarder material.

2. Where the ground surface is covered with an approved Class I vapor retarder material, ventilation openings are not required to be within 3 feet (915 mm) of each external corner of the under-floor space provided the openings are placed to provide cross ventilation of the space.

R408.3 Unvented crawl space. For unvented under-floor spaces the following items shall be provided:

- 1. Exposed earth shall be covered with a continuous Class I vapor retarder. Joints of the vapor retarder shall overlap by 6 inches (152 mm) and shall be sealed or taped. The edges of the vapor retarder shall extend not less than 6 inches (152 mm) up the stem wall and shall be attached and sealed to the stem wall or insulation.
- 2. One of the following shall be provided for the underfloor space:
- 2.1. Continuously operated mechanical exhaust ventilation at a rate equal to 1 cubic foot per minute (0.47 L/s) for each 50 square feet (4.7 m²) of crawl space floor area, including an air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with Section N1102.2.11 of this code.
- 2.2. Conditioned air supply sized to deliver at a rate equal to 1 cubic foot per minute (0.47 L/s) for each 50 square feet (4.7 m²) of under-floor area, including a return air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with Section N1102.2.11 of this code.
- 2.3. Plenum in existing structures complying with Section M1601.5, if under-floor space is used as a plenum.
- 2.4. Dehumidification sized to provide 70 pints (33 liters) of moisture removal per day for every 1,000 square feet (93 m²) of crawl space floor area.
- 44. 50. Change the exception to Section R408.2 to read:

Exception: The total area of ventilation openings shall be permitted to be reduced to 1/1,500 of the under-floor area where the ground surface is covered with an approved Class I vapor retarder material and the required openings are placed to provide cross ventilation of the space. The installation of operable louvers shall not be prohibited nor shall the required openings need to be within three feet (915 mm) of each corner provided there is cross ventilation of the space.

# 45. 51. Add Section R408.3.1 to read:

R408.3.1 Termite inspection. Where an unvented crawl space is installed and meets the criteria in Section R408,

the vertical face of the sill plate shall be clear and unobstructed and an inspection gap shall be provided below the sill plate along the top of any interior foundation wall covering. The gap shall be a minimum of one inch (25.4 mm) and a maximum of two inches (50.8 mm) in width and shall extend throughout all parts of any foundation that is enclosed. Joints between the sill plate and the top of any interior wall covering may be sealed.

#### **Exceptions:**

- 1. In areas not subject to damage by termites as indicated by Table R301.2(1).
- 2. Where other approved means are provided to inspect for potential damage.

Where pier and curtain foundations are installed as depicted in Figure R404.1.5(1), the inside face of the rim joist and sill plate shall be clear and unobstructed except for construction joints which may be sealed.

Exception: Fiberglass or similar insulation may be installed if easily removable.

# 46. 52. Change Section R506.2.1 to read:

R506.2.1 Fill. Fill material shall be free of vegetation and foreign material and shall be natural nonorganic material that is not susceptible to swelling when exposed to moisture. The fill shall be compacted to assure uniform support of the slab, and except where approved, the fill depth shall not exceed 24 inches (610 mm) for clean sand or gravel and 8 inches (203 mm) for earth.

Exception: Material other than natural material may be used as fill material when accompanied by a certification from an RDP and approved by the building official.

# 47. 53. Change Section R506.2.2 to read:

R506.2.2 Base. A 4-inch-thick (102 mm) base course consisting of clean graded sand, gravel or crushed stone passing a 2-inch (51 mm) sieve shall be placed on the prepared subgrade when the slab is below grade.

Exception: A base course is not required when the concrete slab is installed on well drained or sand-gravel mixture soils classified as Group I according to the United Soil Classification System in accordance with Table R405.1. Material other than natural material may be used as base course material when accompanied by a certification from an RDP and approved by the building official.

# 48. Change Item 4 in Table R602.3(1) to read:

	•		
4	Ceiling joist attached to parallel rafter (heel joint) (see Sections R802.3.1 and R802.3.2 and Table R802.5.1(9))	<del>Table</del> <del>R802.5.2</del>	Face nail

# 49. Change Table R602.7(1) to read:

<u>EDITOR'S NOTE:</u> Table R602.7(1), Girder Spans<sup>a</sup> and Header Spans<sup>a</sup> for Exterior Bearing Walls, is deleted in its entirety; therefore, the text of Table R602.7(1) is not set out.

# 50. Change Table R602.7(2) to read:

<u>EDITOR'S NOTE:</u> Table R602.7(2), Girder Spans<sup>a</sup> and Header Spans<sup>a</sup> for Interior Bearing Walls, is deleted in its entirety; therefore, the text of Table R602.7(2) is not set out.

# 51. 54. Change Section R602.10 to read:

R602.10 Wall bracing. Buildings shall be braced in accordance with this section or Section R602.12. Where a building, or portion thereof, does not comply with one or more of the bracing requirements in this section, those portions shall be designed and constructed in accordance with Section R301.1.

The building official shall be permitted to require the permit applicant to identify braced wall lines and braced wall panels on the construction documents as described in this section and provide associated analysis. The building official shall be permitted to waive the analysis of the upper floors where the cumulative length of wall openings of each upper floor wall is less than or equal to the length of the openings of the wall directly below.

# 52. 55. Change Section R602.10.9 to read:

R602.10.9 Braced wall panel support. Braced wall panel support shall be provided as follows:

- 1. Cantilevered floor joists complying with Section R502.3.3 shall be permitted to support braced wall panels.
- 2. Raised floor system post or pier foundations supporting braced wall panels shall be designed in accordance with accepted engineering practice.
- 3. Masonry stem walls with a length of 48 inches (1219 mm) or less supporting braced wall panels shall be reinforced in accordance with Figure R602.10.9. Masonry stem walls with a length greater than 48 inches (1219 mm) supporting braced wall panels shall be constructed in accordance with Section R403.1 Methods ABW and PFH shall not be permitted to attach to masonry stem walls.
- 4. Concrete stem walls with a length of 48 inches (1219 mm) or less, greater than 12 inches (305 mm) tall and less than 6 inches (152 mm) thick shall have reinforcement sized and located in accordance with Figure R602.10.9.

Exception: For masonry stem walls, an approved post-installed adhesive anchoring system shall be permitted as an alternative to the Optional Stem Wall Reinforcement detail in Figure R602.10.9. A minimum of two anchors shall be installed as indicated in Figure R602.10.9. Anchors shall be located not more than 4 inches (102 mm) from each end of the stem wall. Anchors shall be installed into the concrete footing as follows:

- 1. Five-eighth inch (16 mm) treaded rod using a 3/4 inch (19 mm) diameter drilled hole with a minimum embedment of 6 inches (152 mm).
- 2. Number 4 size reinforcing bar using a 5/8-inch (16 mm) diameter drilled hole with a minimum embedment of 4-1/2 inches (114 mm).

A minimum footing thickness of 8 inches (203 mm) is required and the minimum distance from each anchor to the edge of the footing shall be 3-3/4 inches (95 mm). The anchoring adhesive and anchors shall be installed in accordance with the manufacturer's instructions and have a minimum tensile capacity of 5,000 lbs. (22 kN). The bond beam reinforcement and attachment of braced wall panels to the stem wall shall be as shown in Figure R602.10.9.

53. 56. Replace Section R602.12, including all subsections, with the following:

R602.12 Practical wall bracing. All buildings in Seismic Design Categories A and B and detached buildings in Seismic Design Category C shall be permitted to be braced in accordance with this section as an alternative to the requirements of Section R602.10. Where a building, or portion thereof, does not comply with one or more of the bracing requirements in this section, those portions shall be designed and constructed in accordance with Section R301.1. The use of other bracing provisions of Section R602.10, except as specified herein, shall not be permitted.

The building official shall be permitted to require the permit applicant to identify bracing on the construction documents and provide associated analysis. The building official shall be permitted to waive the analysis of the upper floors where the cumulative length of wall openings of each upper floor wall is less than or equal to the length of the openings of the wall directly below.

R602.12.1 Sheathing materials. The following materials shall be permitted for use as sheathing for wall bracing. Exterior walls shall be sheathed on all sheathable surfaces, including infill areas between bracing locations, above and below wall openings, and on gable end walls.

1. Wood structural panels with a minimum thickness of 7/16 inch (9.5 mm) fastened in accordance with Table R602.3(3).

- 2. Structural fiberboard sheathing with a minimum thickness of 1/2 inch (12.7 mm) fastened in accordance with Table R602.3(1).
- 3. Gypsum board with a minimum thickness of 1/2 inch (12.7 mm) fastened in accordance with Table R702.3.5 on interior walls only.

R602.12.2 Braced wall panels. Braced wall panels shall be full-height wall sections sheathed with the materials listed in Section R602.12.1 and complying with the following:

- 1. Exterior braced wall panels shall have a minimum length based on the height of the adjacent opening as specified in Table R602.12.2. Panels with openings on both sides of differing heights shall be governed by the taller opening when determining panel length.
- 2. Interior braced wall panels shall have a minimum length of 48 inches (1220 mm) when sheathing material is applied to one side. Doubled-sided applications shall be permitted to be considered two braced wall panels.
- 3. Braced wall panels shall be permitted to be constructed of Methods ABW, PFH, PFG, and CS-PF in accordance with Section R602.10.4.
- 4. Exterior braced wall panels, other than the methods listed in Item 3 above shall have a finish material installed on the interior. The finish material shall consist of 1/2 inch (12.7 mm) gypsum board or equivalent and shall be permitted to be omitted where the required length of bracing, as determined in Section R602.12.4, is multiplied by 1.40, unless otherwise required by Section R302.6.
- 5. Vertical sheathing joints shall occur over and be fastened to common studs.
- 6. Horizontal sheathing joints shall be edge nailed to 1-1/2 inch (38 mm) minimum thick common blocking.

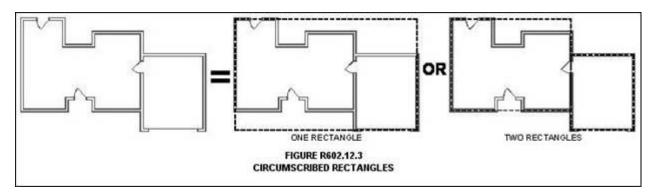
Table R602.12.2 Braced Wall Panel Lengths							
Location	Wall Height (feet)						
	8	9	10	11	12		
	Mi	Minimum Panel Length (inches)					

Adjacent garage door of one-story garage <sup>a</sup>	24	27	30	33	36
Adjacent all other openings <sup>b</sup>					
Clear opening height (inches) ≤ 64	24	27	30	33	36
Clear opening height (inches) ≤ 72	27	27	30	33	36
Clear opening height (inches) ≤ 80	30	30	30	33	36
Clear opening height (inches) > 80	36	36	36	40	40

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

- a. Braced wall panels supporting a gable end wall or roof load only.
- b. Interpolation shall be permitted.

R602.12.3 Circumscribed rectangle. Required length of bracing shall be determined by circumscribing one or more rectangles around the entire building or portions thereof as shown in Figure R602.12.3. Rectangles shall surround all enclosed offsets and projections such as sunrooms and attached garages. Chimneys, partial height projections, and open structures, such as carports and decks, shall be excluded from the rectangle. Each rectangle shall have no side greater than 80 feet (24 384 (24.384 mm) with a maximum 3:1 ratio between the long and short side. Rectangles shall be permitted to be skewed to accommodate angled projections as shown in Figure R602.12.4.3.

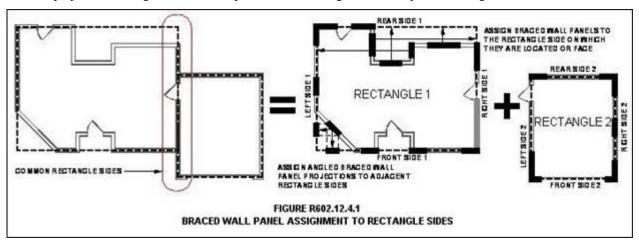


R602.12.4 Required length of bracing. The required length of bracing for each side of a circumscribed rectangle shall be determined using Table R602.12.4. Where multiple rectangles share a common side or sides, the required length of bracing shall equal the sum of the required lengths from all shared rectangle sides.

	Table R602.12.4  Required Length of Bracing Along Each Side of a Circumscribed Rectangle <sup>a,b,c</sup>																	
Eave-to- Number		Number of Floor	Required Length of Bracing on Front/Rear Side (feet)								Required Length of Bracing on Left/Right Side (feet)							
Speed	Ridge Height	Levels	Leng	gth of L	eft/Rig	tht Side	(feet)				Leng	gth of I	Front/R	ear Sid	e (feet)	)		
	(feet)	Above <sup>e,f</sup>	10	20	30	40	50	60	70	80	10	20	30	40	50	60	70	80
		0	2.0	3.5	5.0	6.0	7.5	9.0	10.5	12.0	2.0	3.5	5.0	6.0	7.5	9.0	10.5	12.0
	10	1 <sup>d</sup>	3.5	6.5	9.0	12.0	14.5	17.0	19.8	22.6	3.5	6.5	9.0	12.0	14.5	17.0	19.8	22.6
		2 <sup>d</sup>	5.0	9.5	13.5	17.5	21.5	25.0	29.2	33.4	5.0	9.5	13.5	17.5	21.5	25.0	29.2	33.4
		0	2.6	4.6	6.5	7.8	9.8	11.7	13.7	15.7	2.6	4.6	6.5	7.8	9.8	11.7	13.7	15.7
115	15	1 <sup>d</sup>	4.0	7.5	10.4	13.8	16.7	19.6	22.9	26.2	4.0	7.5	10.4	13.8	16.7	19.6	22.9	26.2
		2 <sup>d</sup>	5.5	10.5	14.9	19.3	23.7	27.5	32.1	36.7	5.5	10.5	14.9	19.3	23.7	27.5	32.1	36.7
		0	2.9	5.2	7.3	8.8	11.1	13.2	15.4	17.6	2.9	5.2	7.3	8.8	11.1	13.2	15.4	17.6
	20	1 <sup>d</sup>	4.5	8.5	11.8	15.6	18.9	22.1	25.8	29.5	4.5	8.5	11.8	15.6	18.9	22.1	25.8	29.5
		2 <sup>d</sup>	6.2	11.9	16.8	21.8	27.3	31.1	36.3	41.5	6.2	11.9	16.8	21.8	27.3	31.1	36.3	41.5
		0	2.5	4.0	6.0	7.5	9.5	11.0	12.8	14.6	2.5	4.0	6.0	7.5	9.5	11.0	12.8	14.6
	10	1 <sup>d</sup>	4.5	8.0	11.0	14.5	18.0	21.0	24.5	28.0	4.5	8.0	11.0	14.5	18.0	21.0	24.5	28.0
		2 <sup>d</sup>	6.0	11.5	16.5	21.5	26.5	31.0	36.2	41.4	6.0	11.5	16.5	21.5	26.5	31.0	36.2	41.4
		0	3.4	5.2	7.8	9.8	12.4	14.3	16.7	19.1	3.4	5.2	7.8	9.8	12.4	14.3	16.7	19.1
130	15	1 <sup>d</sup>	5.2	9.2	12.7	16.7	20.7	24.2	28.2	32.2	5.2	9.2	12.7	16.7	20.7	24.2	28.2	32.2
		2 <sup>d</sup>	6.6	12.7	18.2	23.7	29.2	34.1	39.8	45.5	6.6	12.7	18.2	23.7	29.2	34.1	39.8	45.5
		0	3.8	5.9	8.8	11.1	14.0	16.2	18.9	21.6	3.8	5.9	8.8	11.1	14.0	16.2	18.9	21.6
	20	1 <sup>d</sup>	5.9	10.4	14.4	18.9	23.4	27.3	31.8	36.3	5.9	10.4	14.4	18.9	23.4	27.3	31.8	36.3
		2 <sup>d</sup>	7.5	14.4	20.6	26.8	33.0	38.5	44.9	51.3	7.5	14.4	20.6	26.8	33.0	38.5	44.9	51.3

For SI: 1 ft = 304.8 mm.

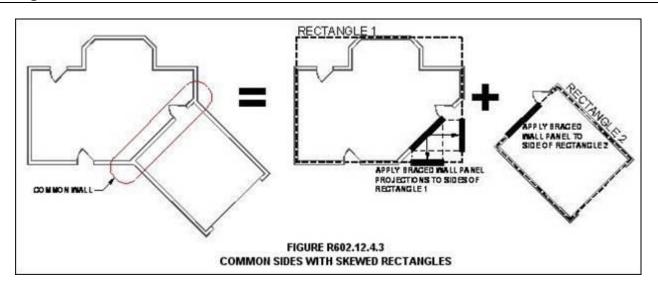
- a. Interpolation shall be permitted; extrapolation shall be prohibited.
- b. For Exposure Category C, multiply the required length of bracing by a factor of 1.20 for a one-story building, 1.30 for a two-story building, and 1.40 for a three-story building.
- c. For wall height adjustments multiply the required length of bracing by the following factors: 0.90 for 8 feet (2438 mm), 0.95 for 9 feet (2743 mm), 1.0 for 10 feet (3048 mm), 1.05 for 11 feet (3353 mm), and 1.10 for 12 feet (3658 mm).
- d. Where braced wall panels supporting stories above have been sheathed in wood structural panels with edge fasteners spaced at 4 inches (102 mm) on center, multiply the required length of bracing by 0.83.
- e. A floor level, habitable or otherwise, contained wholly within the roof rafters or trusses shall not be considered a floor level for purposes of determining the required length of bracing.
- f. A rectangle side with differing number of floor levels above shall use the greatest number when determining the required length of bracing.
  - R602.12.4.1 Braced wall panel assignment to rectangle sides. Braced wall panels shall be assigned to the applicable rectangle side and contribute to its required length of bracing. Panels shall be assigned as specified below and as shown in Figure R602.12.4.1.
  - 1. Exterior braced wall panels shall be assigned to the parallel rectangle side on which they are located or in which they face.
  - 2. Interior braced wall panels shall be assigned to the parallel rectangle side on which they are located or in which they face up to 4 feet (1220 mm) away. Interior braced wall panels more than 4 feet (1220 mm) away from a parallel rectangle side shall not contribute.
  - 3. The projections of angled braced wall panels shall be assigned to the adjacent rectangle sides.



R602.12.4.2 Contributing length. The cumulative contributing length of braced wall panels assigned to a rectangle side shall be greater than or equal to the required length of bracing as determined in Section R602.12.4. The contributing length of a braced wall panel shall be as specified below. When applying contributing length to angled braced wall panels, apply the requirements below to each projection:

- 1. Exterior braced wall panels shall contribute their actual length.
- 2. Interior braced wall panels shall contribute one-half of their actual length.
- 3. The contributing length of Methods ABW, PFH, PFG, and CS-PF shall be in accordance with Table R602.10.5.

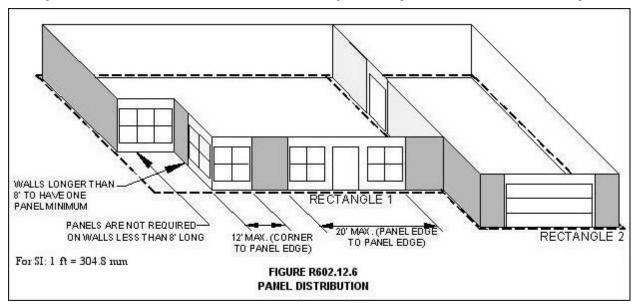
R602.12.4.3 Common sides with skewed rectangles. Braced wall panels located on a common wall where skewed rectangles intersect, as shown in Figure R602.12.4.3, shall be permitted to be assigned to the parallel rectangle side, and their projections shall be permitted to be assigned to the adjacent skewed rectangle sides.



R602.12.5 Cripple walls and framed walls of walk-out basements. For rectangle sides with cripple walls having a maximum height of 48 inches (1220 mm), the required length of bracing shall be as determined in Section R602.12.4. For rectangle sides with cripple walls having a height greater than 48 inches (1220 mm) at any location or framed walls of a walk-out basement, the required length of bracing shall be determined using Table R602.12.4. Braced wall panels within cripple walls and walls of walk-out basements shall comply with Item 4 of Section R602.12.2.

R602.12.6 Distribution of braced wall panels. Braced wall panels shall be distributed in accordance with the following requirements as shown in Figure R602.12.6.

- 1. The edge of a braced wall panel shall be no more than 12 feet (3658 mm) from any building corner or rectangle corner.
- 2. The distance between adjacent edges of braced wall panels shall be no more than 20 feet (6096 mm).
- 3. Segments of exterior walls greater than 8 feet (2438 mm) in length shall have a minimum of one braced wall panel.
- 4. Segments of exterior wall 8 feet (2438 mm) or less in length shall be permitted to have no braced wall panels.



R602.12.6.1 Panels adjacent to balloon framed walls. Braced wall panels shall be placed on each side of each story adjacent to balloon framed walls designed in accordance with Section R602.3 with a maximum height of two stories.

R602.12.7 Braced wall panel connection. Braced wall panels shall be connected to other structural elements in accordance with Section R602.10.8.

R602.12.8 Braced wall panel support. Braced wall panels shall be supported in accordance with Section R602.10.9.

### 54. Change Sections R802.2 and R802.3 to read:

R802.2 Design and construction. The roof and ceiling assembly shall provide continuous ties across the structure to prevent roof thrust from being applied to the supporting walls. The assembly shall be designed and constructed in accordance with the provisions of this chapter and Figures R606.11(1), R606.11(2) and R606.11(3) or in accordance with AWC NDS.

R802.3 Ridge. A ridge board used to connect opposing rafters shall be not less than 1 inch (25 mm) nominal thickness and not less in depth than the cut end of the rafter. Where ceiling joist or rafter ties do not provide a continuous ties across the structure, a ridge beam shall be provided and supported on each end by a wall or girder.

#### 55. Delete Sections R802.3.1, R802.3.2 and R802.3.3.

56. Change Section R802.4 and add Section R802.4.1 to read:

R802.4 Rafters. Rafters shall be in accordance with this section.

R802.4.1 Rafter size. Rafters shall be sized based on the rafter spans in Tables R802.4.1(1) through R802.4.1(8). Rafter spans shall be measured along the horizontal projection of the rafter. For other grades and species and for other loading conditions, refer to the AWC STJR.

57. Change the titles of Tables R802.4(1) and R802.4(2) to Tables R802.5.1(1) and R802.5.1(2), respectively, and change the titles of Tables R802.5.1(1) through R802.5.1(8) to Tables R802.4.1(1) through R802.4.1(8), respectively.

#### 58. Add Sections R802.4.2 through R802.4.5 to read:

R802.4.2 Framing details. Rafters shall be framed not more than 1 1/2 inches (38 mm) offset from each other to a ridge board or directly opposite from each other with a collar tie, gusset plate or ridge strap in accordance with Table R602.3(1). Rafters shall be nailed to the top wall plates in accordance with Table R602.3(1) unless the roof assembly is required to comply with the uplift requirements of Section R802.11.

R802.4.3 Hips and valleys. Hip and valley rafters shall be not less than 2 inches (51 mm) nominal in thickness and not less in depth than the cut end of the rafter. Hip and valley rafters shall be supported at the ridge by a brace to a bearing partition or be designed to carry and distribute the specific load at that point.

R802.4.4 Rafter supports. Where the roof pitch is less than 3:12 (25% slope), structural members that support rafters, such as ridges, hips and valleys, shall be designed

as beams, and bearing shall be provided for rafters in accordance with Section R802.6.

R802.4.5 Purlins. Installation of purlins to reduce the span of rafters is permitted as shown in Figure R802.4.5. Purlins shall be sized not less than the required size of the rafters that they support. Purlins shall be continuous and shall be supported by 2 inch by 4 inch (51 mm by 102 mm) braces installed to bearing walls at a slope not less than 45 degrees (0.79 rad) from the horizontal. The braces shall be spaced not more than 4 feet (1219 mm) on center and the unbraced length of braces shall not exceed 8 feet (2438 mm).

#### 59. Add Figure R802.4.5 to read:

<u>EDITOR'S NOTE:</u> Figure R802.4.5, Brace Rafter Construction, is deleted; therefore the figure is not set out.

#### 60. Add Section R802.4.6 to read:

R802.4.6 Collar ties. Where collar ties are used to connect opposing rafters, they shall be located in the upper third of the attic space and fastened in accordance with Table R602.3(1). Collar ties shall be not less than 1 inch by 4 inches (25 mm by 102 mm) nominal, spaced not more than 4 feet (1219 mm) on center. Ridge straps in accordance with Table R602.3(1) shall be permitted to replace collar ties.

### 61. Change Sections R802.5 and R802.5.1 to read:

R802.5 Ceiling joists. Ceiling joists shall be continuous across the structure or securely joined where they meet over interior partitions in accordance with Table R802.5.2.

R802.5.1 Ceiling joist size. Ceiling joists shall be sized based on the joist spans in Tables R802.4(1) and R802.4(2). For other grades and species and for other loading conditions, refer to the AWC STJR.

62. Delete Figure R802.5.1 and change the title of Table R802.5.1(9) to Table R802.5.2.

### 63. Add Section R802.5.2 to read:

R802.5.2 Ceiling joist and rafter connections. Where ceiling joists run parallel to rafters, they shall be connected to rafters at the top wall plate in accordance with Table R802.5.2. Where ceiling joists are not connected to the rafters at the top wall plate, they shall be installed in the bottom third of the rafter height in accordance with Figure R802.4.5 and Table R802.5.2. Where the ceiling joists are installed above the bottom third of the rafter height, the ridge shall be designed as a beam. Where ceiling joists do not run parallel to rafters, the ceiling joists shall be connected to top plates in accordance with Table R602.3(1). Each rafter shall be tied across the structure with a rafter tie or a 2 inch by 4 inch (51 mm x 102 mm) kicker connected to the ceiling

diaphragm with nails equivalent in capacity to Table R802.5.2.

64. Add Sections R802.5.2.1 through R802.5.2.3 to read:

R802.5.2.1 Ceiling joists lapped. Ends of ceiling joists shall be lapped a minimum of 3 inches (76 mm) or butted over bearing partitions or beams and toenailed to the bearing member. Where ceiling joists are used to provide resistance to rafter thrust, lapped joists shall be nailed together in accordance with Table R802.5.2, and butted joists shall be tied together in a manner to resist such thrust. Joists that do not resist thrust shall be permitted to be nailed in accordance with Table R602.3(1). Wood structural panel roof sheathing, in accordance with Table R503.2.1.1(1), shall not cantilever more than 9 inches (229 mm) beyond the gable endwall unless supported by gable overhang framing.

R802.5.2.2 Rafter ties. Wood rafter ties shall be not less than 2 inches by 4 inches (51 mm by 102 mm) installed in accordance with Table R802.5.2 at each rafter. Other approved rafter tie methods shall be permitted.

R802.5.2.3 Blocking. Blocking shall be not less than utility grade lumber.

65. 57. Delete Section R905.2.8.5.

66. 58. Change Section R1001.8 to read:

R1001.8 Smoke chamber. Smoke chamber walls shall be constructed of solid masonry units, hollow masonry units grouted solid, stone, or concrete. The total minimum thickness of front, back, and side walls shall be 8 inches (203 mm) of solid masonry. When the inside surface of the smoke chamber is formed by corbelled masonry, the inside surface shall be parged smooth. When a lining of firebrick at least 2 inches (51 mm) thick, or a lining of vitrified clay at least 5/8 inch (16 mm) thick, is provided, the total minimum thickness of front, back, and side walls shall be 6 inches (152 mm) of solid masonry, including the lining. Firebrick shall conform to ASTM C 1261 and shall be laid with medium duty refractory mortar conforming to ASTM C 199. Vitrified clay linings shall conform to ASTM C 315.

67. 59. Change Section N1101.13 (R401.2) to read:

N1101.13 (R401.2) Compliance. Projects shall comply with all provisions of Chapter 11 labeled "Mandatory" and one of the following:

- 1. Sections N1101.14 through N1104.
- 2. Section N1105.
- 3. Section N1106.
- 4. The most recent version of REScheck, keyed to the 2015 2018 IECC.

Note: See REScheck compliance guidance issued by DHCD, available at the Department's website.

68. Delete 60. Change Section N1101.14 (R401.3). to read:

N1101.14 (R401.3) Certificate mandatory. A permanent certificate shall be completed by the builder or other approved party and posted on a wall in the space where the furnace is located, a utility room or an approved location inside the building. Where located on an electrical panel, the certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label, or other required labels. The certificate shall indicate the predominant R-values of insulation installed in or on ceilings, roofs, walls, or foundation components, such as slabs, basement walls, crawl space walls, and floors and ducts outside conditioned spaces; U-factors of fenestration and the solar heat gain coefficient (SHGC) of fenestration; and the results from any required duct system and building envelope air leakage testing performed on the building. Where there is more than one value for each component, the certificate shall indicate the value covering the largest area. The certificate shall indicate the types and efficiencies of heating, cooling, and service water heating equipment. Where a gas-fired unvented room heater, electric furnace, or baseboard electric heater is installed in the residence, the certificate shall indicate "gas-fired unvented room heater," "electric furnace," or "baseboard electric heater," as appropriate. An efficiency shall not be indicated for gasfired unvented room heaters, electric furnaces, and electric baseboard heaters.

69. 61. Change the ceiling R-value and wood frame wall R-value categories for climate zone "4 except Marine" in Table N1102.1.2 (R402.1.2) to read:

Ceiling R-Value	Wood Frame Wall R-Value
38	15 or 13 + 1 <sup>h</sup>

70. 62. Change the ceiling U-factor and frame wall U-factor categories for climate zone "4 except Marine" in Table N1102.1.4 (R402.1.4) to read:

Ceiling U-Factor	Frame Wall U-Factor
0.030	0.079

71. 63. Change Section N1102.2.4 (R402.2.4) to read:

N1102.2.4 (R402.2.4) Access hatches and doors. Access doors from conditioned spaces to unconditioned spaces (e.g., attics and crawl spaces) shall be weatherstripped and insulated in accordance with the following values:

1. Hinged vertical doors shall have a minimum overall R-5 insulation value;

- 2. Hatches and scuttle hole covers shall be insulated to a level equivalent to the insulation on the surrounding surfaces; and
- 3. Pull down stairs shall have a minimum of 75% of the panel area having R-5 rigid insulation.

Access shall be provided to all equipment that prevents damaging or compressing the insulation. A wood framed or equivalent baffle or retainer is required to be provided when loose fill insulation is installed, the purpose of which is to prevent the loose fill insulation from spilling into the living space when the attic access is opened, and to provide a permanent means of maintaining the installed R-value of the loose fill insulation.

72. 64. Change Sections N1102.4 (R402.4) and N1102.4.1.1 (R402.4.1.1) to read:

N1102.4 (R402.4) Air leakage. The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of Sections N1102.4.1 through N1102.4.4.

N1102.4.1.1 (R402.4.1.1) Installation (Mandatory). The components of the building thermal envelope as listed in Table N1102.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table N1102.4.1.1, as applicable to the method of construction. Where required by the code official, an approved third party shall inspect all components and verify compliance.

73. 65. Change the title of the "Insulation Installation Criteria" category of Table N1102.4.1.1 (R402.4.1.1); change the "Shower/tub on exterior wall" category of Table N1102.4.1.1 (R402.4.1.1), and add footnotes "b" and "c" to Table N1102.4.1.1 (R402.4.1.1) to read:

Component	Air Barrier Criteria	Insulation Installation Criteria <sup>b</sup>
Shower/tub on exterior wall <sup>c</sup>	The air barrier installed at exterior walls adjacent to showers and tubs shall be installed on the interior side and separate the exterior walls from the showers and tubs.	Exterior walls adjacent to showers and tubs shall be insulated.

b. Structural integrity of headers shall be in accordance with the applicable building code.

c. Air barriers used behind showers and tubs on exterior walls shall be of a permeable material that does not cause the entrapment of moisture in the stud cavity.

74. <u>66.</u> Change Section N1102.4.1.2 (R402.4.1.2) and add Sections N1102.4.1.2.1 (R402.4.1.2.1), N1102.4.1.2.2 (R402.4.1.2.2), and N1102.4.1.3 (R402.4.1.3) to read:

N1102.4.1.2 (R402.4.1.2) Air sealing. Building envelope air tightness shall be demonstrated to comply with either Section N1102.4.1.2.1 or N1102.4.1.2.2.

N1102.4.1.2.1 (R402.4.1.2.1) Testing option. building or dwelling unit shall be tested for and verified as having an air leakage rate not exceeding five air changes per hour in Climate Zone 4. Testing shall be conducted in accordance with a blower door RESNET/ICC 380, ASTM E 779, or ASTM E 1827 and reported at a pressure of 0.2 inches w.g. (50 Pa). Where required by the building official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the building official. Testing shall be conducted by a Virginia licensed general contractor, a Virginia licensed HVAC contractor, a Virginia licensed home inspector, a Virginia registered design professional, a certified BPI Envelope Professional, a certified HERS rater, or a certified duct and envelope tightness rater. The party conducting the test shall have been trained on the equipment used to perform the test. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

Note: Should additional sealing be required as a result of the test, consideration may be given to the issuance of temporary certificate of occupancy in accordance with Section 116.1.1.

# During testing:

- 1. Exterior windows and doors and fireplace and stove doors shall be closed, but not sealed beyond the intended weatherstripping or other infiltration control measures;
- 2. Dampers, including exhaust, intake, makeup air, backdraft, and flue dampers shall be closed, but not sealed beyond intended infiltration control measures;
- 3. Interior doors, if installed at the time of the test, shall be open;
- 4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;
- 5. Heating and cooling systems, if installed at the time of the test, shall be turned off; and

6. Supply and return registers, if installed at the time of the test, shall be fully open.

N1102.4.1.2.2 (R402.4.1.2.2) Visual inspection option. Building envelope tightness shall be considered acceptable when the items listed in Table N1102.4.1.1, applicable to the method of construction, are field verified. Where required by the building official, an approved party, independent from the installer, shall inspect the air barrier. When this option is chosen, whole house mechanical ventilation shall be provided in accordance with Section M1507.3.

N1102.4.1.3 (R402.4.1.3) Leakage rate (Prescriptive). The building or dwelling unit shall have an air leakage rate less than 5 changes per hour as verified in accordance with Section N1102.4.1.2.

75. 67. Change Section N1103.3.3 (R403.3.3) to read:

N1103.3.3 (R403.3.3) Duct testing (Mandatory). Ducts shall be pressure tested to determine air leakage by one of the following methods:

- 1. Rough-in test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure if installed at the time of the test. All registers shall be taped or otherwise sealed during the test.
- 2. Postconstruction test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. Registers shall be taped or otherwise sealed during the test.

Exception: A duct air leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope.

A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. The licensed mechanical contractor installing the mechanical system shall be permitted to perform the duct testing. The contractor shall have been trained on the equipment used to perform the test.

### 68. Delete Section N1103.3.5 (R403.3.5).

76. 69. Change Section N1103.7 (R403.7) to read:

N1103.7 (R403.7) Equipment and appliance sizing. Heating and cooling equipment and appliances shall be sized in accordance with ACCA Manual S or other approved sizing methodologies based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies.

Exception: Heating and cooling equipment and appliance sizing shall not be limited to the capacities determined in accordance with Manual S or other approved sizing

methodologies where any of the following conditions apply:

- 1. The specified equipment or appliance utilizes multistage technology or variable refrigerant flow technology and the loads calculated in accordance with the approved heating and cooling methodology fall within the range of the manufacturer's published capacities for that equipment or appliance.
- 2. The specified equipment or appliance manufacturer's published capacities cannot satisfy both the total and sensible heat gains calculated in accordance with the approved heating and cooling methodology and the next larger standard size unit is specified.
- 3. The specified equipment or appliance is the lowest capacity unit available from the specified manufacturer.

77. 70. Change footnote for Table N1106.4 (R406.4) to read:

Table N1106.4 (R406.4)				
Maximum Energy Rating I	ndex <sup>a</sup>			
Climate Zone	Energy Rating Index			
1	<del>52</del>			
2	<del>52</del>			
3	<del>51</del>			
4	<del>62</del>			
5	<del>55</del>			
6	54			
7	53			
8	53			

a. When onsite renewable energy is included for compliance using the ERI analysis per Section N1106.4 (R406.4), the building shall meet the mandatory requirements of Section N1106.2 (R406.2) and the building thermal envelope shall be greater than or equal to levels of energy efficiency and solar heat gain coefficient in Table N1102.1.2 (R402.1.2), with a ceiling R-value of 49 and a wood frame wall R-value of 20 or 13+5, or Table N1102.1.4 (R402.1.4), with a ceiling U-factor of 0.026 and a frame wall U-factor of 0.060.

78. 71. Delete Section N1109.1.1.1 (R503.1.1.1).

79. 72. Change Section M1401.3 to read:

M1401.3 Equipment and appliance sizing. Heating and cooling equipment and appliances shall be sized in accordance with ACCA Manual S or other approved sizing methodologies based on building loads calculated

in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies.

Exception: Heating and cooling equipment and appliance sizing shall not be limited to the capacities determined in accordance with Manual S or other approved sizing methodologies where any of the following conditions apply:

- 1. The specified equipment or appliance utilizes multistage technology or variable refrigerant flow technology and the loads calculated in accordance with the approved heating and cooling methodology fall within the range of the manufacturer's published capacities for that equipment or appliance.
- 2. The specified equipment or appliance manufacturer's published capacities cannot satisfy both the total and sensible heat gains calculated in accordance with the approved heating and cooling methodology, and the next larger standard size unit is specified.
- 3. The specified equipment or appliance is the lowest capacity unit available from the specified manufacturer.

# 80. 73. Add Section M1501.2 to read:

M1501.2 Transfer air. Air transferred from occupiable spaces other than kitchens, baths, and toilet rooms shall not be prohibited from serving as makeup air for exhaust systems. Transfer openings between spaces shall be of the same cross-sectional area as the free area of the makeup air openings. Where louvers and grilles are installed, the required size of openings shall be based on the net free area of each opening. Where the design and free area of louvers and grilles are not known, it shall be assumed that wood louvers will have 25% free area and metal louvers and grilles will have 75% free area.

#### 81. 74. Change Section M1502.4.2 to read:

M1502.4.2 Duct installation. Exhaust ducts shall be supported at 4-foot (1219 mm) intervals and shall be secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners that protrude into the inside of the duct. Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation.

### 82. 75. Change Section M1503.4 M1503.6 to read:

M1503.4 M1503.6 Makeup air required. Exhaust hood systems capable of exhausting more than 400 cubic feet per minute (0.19 m³/s) shall be provided with makeup air at a rate approximately equal to the exhaust air rate in excess of 400 cubic feet per minute (0.19 m³/s). Such makeup air systems shall be equipped with a means of

closure and shall be automatically controlled to start and operate simultaneously with the exhaust system.

Exception: Intentional openings for makeup air are not required for kitchen exhaust systems capable of exhausting not greater than 600 cubic feet per minute (0.28 m³/s) provided that one of the following conditions is met:

- 1. Where the floor area within the air barrier of a dwelling unit is at least 4500 1,500 square feet (139.35 m<sup>2</sup>), and where natural draft or mechanical draft spaceheating or water-heating appliances are not located within the air barrier.
- 2. Where the floor area within the air barrier of a dwelling unit is at least 3000 3,000 square feet (278.71 m<sup>2</sup>), and where natural draft space-heating or waterheating appliances are not located within the air barrier.

#### 83. 76. Add Section M1801.1.1 to read:

M1801.1.1 Equipment changes. Upon the replacement or new installation of any fuel-burning appliances or equipment in existing buildings, an inspection or inspections shall be conducted to ensure that the connected vent or chimney systems comply with the following:

- 1. Vent or chimney systems are sized in accordance with this code.
- 2. Vent or chimney systems are clean, free of any obstruction or blockages, defects or deterioration and are in operable condition.

Where not inspected by the local building department, persons performing such changes or installations shall certify to the building official that the requirements of Items 1 and 2 of this section are met.

# 84. <u>77.</u> Change Sections G2411.1 and <u>G2411.1.1</u> <u>G2411.2</u> to read:

G2411.1 Pipe and tubing. Each above-group portion of a gas piping system that is likely to become energized shall be electrically continuous and bonded to an effective ground-fault current path. Gas piping shall be considered to be bonded where it is connected to appliances that are connected to the equipment grounding conductor of the circuit supplying that appliance. Corrugated stainless steel tubing (CSST) piping systems listed with an arc resistant jacket or coating system in accordance with ANSI LC 1/CSA 6.26 shall comply with this section. Where any CSST segments of a piping system are not listed with an arc resistant jacket or coating system in accordance with ANSI LC 1/CSA 6.26, Section G2411.1.1 G2411.2 shall apply.

G2411.1.1 G2411.2 CSST without arc resistant jacket or coating system. CSST gas piping systems and piping

systems containing one or more segments of CSST not listed with an arc resistant jacket or coating system in accordance with ANSI LC 1/CSA 6.26 shall be bonded to the electrical service grounding electrode system or, where provided, the lightning protection electrode system and shall comply with Sections G2411.1.1.1 G2411.2.1 through G2411.1.1.5 G2411.2.5.

#### 85. 78. Add Section G2425.1.1 to read:

G2425.1.1 Equipment changes. Upon the replacement or new installation of any fuel-burning appliances or equipment in existing buildings, an inspection or inspections shall be conducted to ensure that the connected vent or chimney systems comply with the following:

- 1. Vent or chimney systems are sized in accordance with this code.
- 2. Vent or chimney systems are clean, free of any obstruction or blockages, defects, or deterioration and are in operable condition.

Where not inspected by the local building department, persons performing such changes or installations shall certify to the building official that the requirements of Items 1 and 2 of this section are met.

#### 86. 79. Change Section G2439.7.2 to read:

G2439.7.2 Duct installation. Exhaust ducts shall be supported at 4-foot (1219 mm) intervals and secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners that protrude into the inside of the duct. Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation.

## 87. 80. Change Section P2601.2 to read:

P2601.2 Connections. Plumbing fixtures, drains and appliances used to receive or discharge liquid wastes or sewage shall be directly connected to the sanitary drainage system of the building or premises, in accordance with the requirements of this code. This section shall not be construed to prevent indirect waste systems.

Exception: Bathtubs, showers, lavatories, clothes washers and laundry trays shall not be required to discharge to the sanitary drainage system where such fixtures discharge to an approved nonpotable gray water system in accordance with the applicable provisions of Sections P2910, P2911, and P2912.

### 88. 81. Change Section P2602.1 to read:

P2602.1 General. The water and drainage system of any building or premises where plumbing fixtures are installed shall be connected to a public or private water supply and a public or private sewer system. As provided for in Section 103.5 of Part I of the Virginia Uniform Statewide Building Code (13VAC5-63) for functional design, water supply sources and sewage disposal systems are regulated and approved by the Virginia Department of Health and the Virginia Department of Environmental Quality.

Note: See also the Memorandums of Agreement in the "Related Laws Package," which is available from the Virginia Department of Housing and Community Development.

#### 89. 82. Add Section P2602.3 to read:

P2602.3 Tracer wire. Nonmetallic water service piping that connects to public systems shall be locatable. An insulated copper tracer wire, 18 AWG minimum in size and suitable for direct burial or an equivalent product, shall be utilized. The wire shall be installed in the same trench as the water service piping and within 12 inches (305 mm) of the pipe and shall be installed to within five feet (1524 mm) of the building wall to the point where the building water service pipe intersects with the public water supply. At a minimum, one end of the wire shall terminate above grade to provide access to the wire in a location that is resistant to physical damage, such as with a meter vault or at the building wall.

### 90. 83. Add Section P2901.1.1 to read:

P2901.1.1 Nonpotable fixtures and outlets. Nonpotable water shall be permitted to serve nonpotable type fixtures and outlets in accordance with the applicable provisions of Sections P2910, P2911, and P2912.

# 91. 84. Change Section P2903.5 to read:

P2903.5 Water hammer. The flow velocity of the water distribution system shall be controlled to reduce the possibility of water hammer. A water-hammer arrestor shall be installed where quick-closing valves are utilized, unless otherwise approved. Water hammer arrestors shall be installed in accordance with manufacturer's specifications. Water hammer arrestors shall conform to ASSE 1010.

## 85. Change Section P2906.2.1 to read:

P2906.2.1 Lead content of drinking water pipe and fittings. Pipe, pipe fittings, joints, valves, faucets, and fixture fittings utilized to supply water for drinking or cooking purposes shall comply with NSF 372.

92. 86. Change Sections P2910.1 through P2910.14, including subsections, to read:

P2910.1 Scope. The provisions of this section shall govern the materials, design, construction, and installation of nonpotable water systems subject to this code.

P2910.1.1 Design of nonpotable water systems. All portions of nonpotable water systems subject to this code shall be constructed using the same standards and requirements for the potable water systems or drainage systems as provided for in this code unless otherwise specified in this section or Section P2911 or P2912, as applicable.

P2910.2 Makeup water. Makeup water shall be provided for all nonpotable water supply systems. The makeup water system shall be designed and installed to provide supply of water in the amounts and at the pressures specified in this code. The makeup water supply shall be potable and be protected against backflow in accordance with the applicable requirements of Section P2902.

P2910.2.1 Makeup water sources. Nonpotable water shall be permitted to serve as makeup water for gray water and rainwater systems.

P2910.2.2 Makeup water supply valve. A full-open valve shall be provided on the makeup water supply line.

P2910.2.3 Control valve alarm. Makeup water systems shall be fitted with a warning mechanism that alerts the user to a failure of the inlet control valve to close correctly. The alarm shall activate before the water within the storage tank begins to discharge into the overflow system.

P2910.3 Sizing. Nonpotable water distribution systems shall be designed and sized for peak demand in accordance with approved engineering practice methods that comply with the applicable provisions of this chapter.

P2910.4 Signage required. All nonpotable water outlets, other than water closets and urinals, such as hose connections, open ended pipes, and faucets shall be identified at the point of use for each outlet with signage that reads as follows: "Nonpotable water is utilized for (insert application name). Caution: nonpotable water. DO NOT DRINK." The words shall be legibly and indelibly printed on a tag or sign constructed of corrosion-resistant waterproof material or shall be indelibly printed on the fixture. The letters of the words shall be not less than 0.5 inches (12.7 mm) in height and in colors in contrast to the background on which they are applied. The pictograph shown in Figure P2910.4 shall appear on the signage required by this section.



P2910.5 Potable water supply system connections. Where a potable water supply system is connected to a nonpotable water system, the potable water supply shall be protected against backflow in accordance with the applicable provisions of Section P2902.

P2910.6 Nonpotable water system connections. Where a nonpotable water system is connected and supplies water to another nonpotable water system, the nonpotable water system that supplies water shall be protected against backflow in accordance with the applicable provisions of Section P2902.

P2910.7 Approved components and materials. Piping, plumbing components, and materials used in the nonpotable water drainage and distribution systems shall be approved for the intended application and compatible with the water and any disinfection or treatment systems used.

P2910.8 Insect and vermin control. Nonpotable water systems shall be protected to prevent the entrance of insects and vermin into storage and piping systems. Screen materials shall be compatible with system material and shall not promote corrosion of system components.

P2910.9 Freeze protection. Nonpotable water systems shall be protected from freezing in accordance with the applicable provisions of Chapter 26.

P2910.10 Nonpotable water storage tanks. Nonpotable water storage tanks shall be approved for the intended application and comply with Sections P2910.10.1 through P2910.10.12.

P2910.10.1 Sizing. The holding capacity of storage tanks shall be sized for the intended use.

P2910.10.2 Inlets. Storage tank inlets shall be designed to introduce water into the tank and avoid agitating the contents of the storage tank. The water supply to storage tanks shall be controlled by fill valves or other automatic supply valves designed to stop the flow of incoming water before the tank contents reach the overflow pipes.

P2910.10.3 Outlets. Outlets shall be located at least 4 inches (102 mm) above the bottom of the storage tank and shall not skim water from the surface.

P2910.10.4 Materials and location. Storage tanks shall be constructed of material compatible with treatment systems used to treat water. Above grade storage vessels shall be constructed using opaque, UV-resistant materials such as tinted plastic, lined metal, concrete, or wood or painted to prevent algae growth. Above grade storage tanks shall be protected from direct sunlight unless their design specifically incorporates the use of the sunlight heat transfer. Wooden storage tanks shall be provided with a flexible liner. Storage tanks and their manholes shall not be located directly under soil or waste piping or sources of contamination.

P2910.10.5 Foundation and supports. Storage tanks shall be supported on a firm base capable of withstanding the storage tank's weight when filled to capacity. Storage tanks shall be supported in accordance with the applicable provisions of the IBC.

P2910.10.5.1 Ballast. Where the soil can become saturated, an underground storage tank shall be ballasted, or otherwise secured, to prevent the effects of buoyancy. The combined weight of the tank and hold down ballast shall meet or exceed the buoyancy force of the tank. Where the installation requires a foundation, the foundation shall be flat and shall be designed to support the storage tank weight when full, consistent with the bearing capability of adjacent soil.

P2910.10.5.2 Structural support. Where installed below grade, storage tank installations shall be designed to withstand earth and surface structural loads without damage.

P2910.10.6 Overflow. The storage tank shall be equipped with an overflow pipe having a diameter not less than that shown in Table P2910.10.6. The overflow outlet shall discharge at a point not less than 6 inches (152 mm) above the roof or roof drain, floor or floor drain, or over an open water-supplied fixture. The overflow outlet shall terminate through a check valve. Overflow pipes shall not be directed on walkways. The overflow drain shall not be equipped with a shutoff valve. A minimum of one cleanout shall be provided on each overflow pipe in accordance with the applicable provisions of Section P3005.2.

Table P2910.10.6 Sizes for Overflow Pipes for Water Supply Tanks					
Maximum Capacity of Water Supply Line to Tank (gpm)	Diameter of Overflow Pipe (inches)				
0 - 50	2				

50 - 150	2-1/2
150 - 200	3
200 - 400	4
400 - 700	5
700 - 1,000	6
Over 1,000	8

For SI: 1 inch = 25.4 mm, 1 gallon per minute = 3.785 L/m.

P2910.10.7 Access. A minimum of one access opening shall be provided to allow inspection and cleaning of the tank interior. Access openings shall have an approved locking device or other approved method of securing access. Below grade storage tanks, located outside of the building, shall be provided with either a manhole not less than 24 inches (610 mm) square or a manhole with an inside diameter not less than 24 inches (610 mm). The design and installation of access openings shall prohibit surface water from entering the tank. Each manhole cover shall have an approved locking device or other approved method of securing access.

Exception: Storage tanks under 800 gallons (3028 L) in volume installed below grade shall not be required to be equipped with a manhole, but shall have an access opening not less than 8 inches (203 mm) in diameter to allow inspection and cleaning of the tank interior.

P2910.10.8 Venting. Storage tanks shall be vented. Vents shall not be connected to the sanitary drainage system. Vents shall be at least equal in size to the internal diameter of the drainage inlet pipe or pipes connected to the tank. Where installed at grade, vents shall be protected from contamination by means of a U-bend installed with the opening directed downward. Vent outlets shall extend a minimum of 12 inches (304.8 mm) above grade, or as necessary to prevent surface water from entering the storage tank. Vent openings shall be protected against the entrance of vermin and insects. Vents serving gray water tanks shall terminate in accordance with the applicable provisions of Sections P3103 and P2910.8.

P2910.10.9 Drain. Where drains are provided, they shall be located at the lowest point of the storage tank. The tank drain pipe shall discharge as required for overflow pipes and shall not be smaller in size than specified in Table P2910.10.6. A minimum of one cleanout shall be provided on each drain pipe in accordance with Section P3005.2.

P2910.10.10 Labeling and signage. Each nonpotable water storage tank shall be labeled with its rated capacity and the location of the upstream bypass valve.

Underground and otherwise concealed storage tanks shall be labeled at all access points. The label shall read: "CAUTION: NONPOTABLE WATER - DO NOT DRINK." Where an opening is provided that could allow the entry of personnel, the opening shall be marked with the words: "DANGER - CONFINED SPACE." Markings shall be indelibly printed on a tag or sign constructed of corrosion-resistant waterproof material mounted on the tank or shall be indelibly printed on the tank. The letters of the words shall be not less than 0.5 inches (12.7 mm) in height and shall be of a color in contrast with the background on which they are applied.

P2910.10.11 Storage tank tests. Storage tanks shall be tested in accordance with the following:

- 1. Storage tanks shall be filled with water to the overflow line prior to and during inspection. All seams and joints shall be left exposed and the tank shall remain water tight without leakage for a period of 24 hours.
- 2. After 24 hours, supplemental water shall be introduced for a period of 15 minutes to verify proper drainage of the overflow system and verify that there are no leaks.
- 3. Following a successful test of the overflow system, the water level in the tank shall be reduced to a level that is at 2 inches (50.8 mm) below the makeup water offset point. The tank drain shall be observed for proper operation. The makeup water system shall be observed for proper operation, and successful automatic shutoff of the system at the refill threshold shall be verified. Water shall not be drained from the overflow at any time during the refill test.
- 4. Air tests shall be permitted in lieu of water testing as recommended by the tank manufacturer or the tank standard.

P2910.10.12 Structural strength. Storage tanks shall meet the applicable structural strength requirements of the IBC.

P2910.11 Trenching requirements for nonpotable water system piping. Underground nonpotable water system piping shall be horizontally separated from the building sewer and potable water piping by 5 feet (1524 mm) of undisturbed or compacted earth. Nonpotable water system piping shall not be located in, under, or above sewage systems cesspools, septic tanks, septic tank drainage fields, or seepage pits. Buried nonpotable water system piping shall comply with the requirements of this code for the piping material installed.

# **Exceptions:**

1. The required separation distance shall not apply where the bottom of the nonpotable water pipe within 5 feet (1524 mm) of the sewer is equal to or greater than 12

- inches (305 mm) above the top of the highest point of the sewer and the pipe materials conforms to Table P3002.2.
- 2. The required separation distance shall not apply where the bottom of the potable water service pipe within 5 feet (1524 mm) of the nonpotable water pipe is a minimum of 12 inches (305 mm) above the top of the highest point of the nonpotable water pipe and the pipe materials comply with the requirements of Table P2906.5.
- 3. Nonpotable water pipe is permitted to be located in the same trench with building sewer piping, provided that such sewer piping is constructed of materials that comply with the requirements of Table P3002.1(2).
- 4. The required separation distance shall not apply where a nonpotable water pipe crosses a sewer pipe, provided that the pipe is sleeved to at least 5 feet (1524 mm) horizontally from the sewer pipe centerline on both sides of such crossing with pipe materials that comply with Table P3002.1(2).
- 5. The required separation distance shall not apply where a potable water service pipe crosses a nonpotable water pipe provided that the potable water service pipe is sleeved for a distance of at least 5 feet (1524 mm) horizontally from the centerline of the nonpotable pipe on both sides of such crossing with pipe materials that comply with Table P3002.1(2).
- P2910.12 Outdoor outlet access. Sillcocks, hose bibs, wall hydrants, yard hydrants, and other outdoor outlets that are supplied by nonpotable water shall be located in a locked vault or shall be operable only by means of a removable key.
- P2910.13 Drainage and vent piping and fittings. Nonpotable drainage and vent pipe and fittings shall comply with the applicable material standards and installation requirements in accordance with provisions of Chapter 30.
- P2910.13.1 Labeling and marking. Identification of nonpotable drainage and vent piping shall not be required.
- P2910.14 Pumping and control system. Mechanical equipment, including pumps, valves, and filters, shall be accessible and removable in order to perform repair, maintenance, and cleaning. The minimum flow rate and flow pressure delivered by the pumping system shall be designed for the intended application in accordance with the applicable provisions of Section P2903.
- 93. 87. Add Sections P2910.15 through P2910.18, including subsections, to read:
- P2910.15 Water-pressure reducing valve or regulator. Where the water pressure supplied by the pumping system exceeds 80 psi (552 kPa) static, a pressure-

reducing valve shall be installed to reduce the pressure in the nonpotable water distribution system piping to 80 psi (552 kPa) static or less. Pressure-reducing valves shall be specified and installed in accordance with the applicable provisions of Section P2903.3.1.

P2910.16 Distribution pipe. Distribution piping utilized in nonpotable water stems shall comply with Sections P2910.16.1 through P2910.16.4.

P2910.16.1 Materials, joints, and connections. Distribution piping and fittings shall comply with the applicable material standards and installation requirements in accordance with applicable provisions of Chapter 29.

P2910.16.2 Design. Distribution piping shall be designed and sized in accordance with the applicable provisions of Chapter 29.

P2910.16.3 Labeling and marking. Distribution piping labeling and marking shall comply with Section P2901.1 P2901.2.

P2910.16.4 Backflow prevention. Backflow preventers shall be installed in accordance with the applicable provisions of Section P2902.

P2910.17 Tests and inspections. Tests and inspections shall be performed in accordance with Sections P2910.17.1 through P2910.17.5.

P2910.17.1 Drainage and vent pipe test. Drain, waste, and vent piping used for gray water and rainwater nonpotable water systems shall be tested in accordance with the applicable provisions of Section P2503.

P2910.17.2 Storage tank test. Storage tanks shall be tested in accordance with the Section P2910.10.11.

P2910.17.3 Water supply system test. Nonpotable distribution piping shall be tested in accordance with Section P2503.7.

P2910.17.4 Inspection and testing of backflow prevention assemblies. The testing of backflow preventers and backwater valves shall be conducted in accordance with Section P2503.8.

P2910.17.5 Inspection of vermin and insect protection. Inlets and vent terminations shall be visually inspected to verify that each termination is installed in accordance with Section P2910.10.8.

P2910.18 Operation and maintenance manuals. Operations and maintenance materials for nonpotable water systems shall be provided as prescribed by the system component manufacturers and supplied to the owner to be kept in a readily accessible location.

94. 88. Change the title of Section P2911 to "Gray Water Nonpotable Water Systems."

95. 89. Change Sections P2911.1 through P2911.6, including subsections, to read:

P2911.1 Gray water nonpotable water systems. This code is applicable to the plumbing fixtures, piping or piping systems, storage tanks, drains, appurtenances, and appliances that are part of the distribution system for gray water within buildings and to storage tanks and associated piping that are part of the distribution system for gray water outside of buildings. This code does not regulate equipment used for, or the methods of, processing, filtering, or treating gray water, which may be regulated by the Virginia Department of Health or the Virginia Department of Environmental Quality.

P2911.1.1 Separate systems. Gray water nonpotable water systems, unless approved otherwise under the permit from the Virginia Department of Health, shall be separate from the potable water system of a building with no cross connections between the two systems except as permitted by the Virginia Department of Health.

P2911.2 Water quality. Each application of gray water reuse shall meet the minimum water quality requirements set forth in Sections P2911.2.1 through P2911.2.4 unless otherwise superseded by other state agencies.

P2911.2.1 Disinfection. Where the intended use or reuse application for nonpotable water requires disinfection or other treatment or both, it shall be disinfected as needed to ensure that the required water quality is delivered at the point of use or reuse.

P2911.2.2 Residual disinfectants. Where chlorine is used for disinfection, the nonpotable water shall contain not more than 4 parts per million (4 mg/L) of free chlorine, combined chlorine, or total chlorine. Where ozone is used for disinfection, the nonpotable water shall not exceed 0.1 parts per million (by volume) of ozone at the point of use.

P2911.2.3 Filtration. Water collected for reuse shall be filtered as required for the intended end use. Filters shall be accessible for inspection and maintenance. Filters shall utilize a pressure gauge or other approved method to indicate when a filter requires servicing or replacement. Shutoff valves installed immediately upstream and downstream of the filter shall be included to allow for isolation during maintenance.

P2911.2.4 Filtration required. Gray water utilized for water closet and urinal flushing applications shall be filtered by a 100 micron or finer filter.

P2911.3 Storage tanks. Storage tanks utilized in gray water nonpotable water systems shall comply with Section P2910.10.

P2911.4 Retention time limits. Untreated gray water shall be retained in storage tanks for a maximum of 24 hours.

P2911.5 Tank location. Storage tanks shall be located with a minimum horizontal distance between various elements as indicated in Table P2911.5.1.

Table P2911.5.1 Location of Nonpotable Gray Water Reuse Storage Tanks				
Element	Minimum Horizontal Distance from Storage Tank (feet)			
Lot line adjoining private lots	5			
Sewage systems	5			
Septic tanks	5			
Water wells	50			
Streams and lakes	50			
Water service	5			
Public water main	10			

P2911.6 Valves. Valves shall be supplied on gray water nonpotable water drainage systems in accordance with Sections P2911.6.1 and P2911.6.2.

P2911.6.1 Bypass valve. One three-way diverter valve certified to NSF 50 or other approved device shall be installed on collection piping upstream of each storage tank, or drainfield, as applicable, to divert untreated gray water to the sanitary sewer to allow servicing and inspection of the system. Bypass valves shall be installed downstream of fixture traps and vent connections. Bypass valves shall be labeled to indicate the direction of flow, connection, and storage tank or drainfield connection. Bypass valves shall be provided with access for operation and maintenance. Two shutoff valves shall not be installed to serve as a bypass valve.

P2911.6.2 Backwater valve. Backwater valves shall be installed on each overflow and tank drain pipe to prevent unwanted water from draining back into the storage tank. If the overflow and drain piping arrangement is installed to physically not allow water to drain back into the tank, such as in the form of an air gap, backwater valves shall not be required. Backwater valves shall be constructed and installed in accordance with Section P3008.

90. Delete Sections P2911.7 through P2911.13, including subsections.

96. 91. Change the title of Section P2912 to "Rainwater Nonpotable Water Systems."

97. 92. Change Sections P2912.1 through P2912.10, including subsections, to read:

P2912.1 General. The provisions of this section shall govern the design, construction, installation, alteration, and repair of rainwater nonpotable water systems for the collection, storage, treatment, and distribution of rainwater for nonpotable applications. The provisions of CSA B805/ICC 805 shall be permitted as an alternative to the provisions contained in this section for the design, construction, installation, alteration, and repair of rainwater nonpotable water systems for the collection, storage, treatment, and distribution of rainwater for nonpotable applications. Roof runoff or stormwater runoff collection surfaces shall be limited to roofing materials, public pedestrian accessible roofs, and subsurface collection identified in CSA B805/ICC 805 Table 7.1. Stormwater runoff shall not be collected from any other surfaces.

P2912.2 Water quality. Each application of rainwater reuse shall meet the minimum water quality requirements set forth in Sections P2912.2.1 through P2912.2.4 unless otherwise superseded by other state agencies.

P2912.2.1 Disinfection. Where the intended use or reuse application for nonpotable water requires disinfection or other treatment or both, it shall be disinfected as needed to ensure that the required water quality is delivered at the point of use or reuse.

P2912.2.2 Residual disinfectants. Where chlorine is used for disinfection, the nonpotable water shall contain not more than 4 parts per million (4 mg/L) of free chlorine, combined chlorine, or total chlorine. Where ozone is used for disinfection, the nonpotable water shall not exceed 0.1 parts per million (by volume) of ozone at the point of use.

P2912.2.3 Filtration. Water collected for reuse shall be filtered as required for the intended end use. Filters shall be accessible for inspection and maintenance. Filters shall utilize a pressure gauge or other approved method to indicate when a filter requires servicing or replacement. Shutoff valves installed immediately upstream and downstream of the filter shall be included to allow for isolation during maintenance.

P2912.2.4 Filtration required. Rainwater utilized for water closet and urinal flushing applications shall be filtered by a 100 micron or finer filter.

P2912.3 Collection surface. Rainwater shall be collected only from aboveground impervious roofing surfaces constructed from approved materials. Overflow or discharge piping from appliances or equipment or both, including but not limited to evaporative coolers, water heaters, and solar water heaters shall not discharge onto rainwater collection surfaces.

P2912.4 Collection surface diversion. At a minimum, the first 0.04 inches (1.016 mm) of each rain event of 25 gallons (94.6 L) per 1000 1.000 square feet (92.9 m²) shall be diverted from the storage tank by automatic means and not require the operation of manually operated valves or devices. Diverted water shall not drain onto other collection surfaces that are discharging to the rainwater system or to the sanitary sewer. Such water shall be diverted from the storage tank and discharged in an approved location.

P2912.5 Pre-tank filtration. Downspouts, conductors, and leaders shall be connected to a pre-tank filtration device. The filtration device shall not permit materials larger than 0.015 inches (0.4 mm).

P2912.6 Roof gutters and downspouts. Gutters and downspouts shall be constructed of materials that are compatible with the collection surface and the rainwater quality for the desired end use. Joints shall be made watertight.

P2912.6.1 Slope. Roof gutters, leaders, and rainwater collection piping shall slope continuously toward collection inlets. Gutters and downspouts shall have a slope of not less than 1 unit in 96 units along their entire length, and shall not permit the collection or pooling of water at any point.

P2912.6.2 Size. Gutters and downspouts shall be installed and sized in accordance with local rainfall rates.

P2912.6.3 Cleanouts. Cleanouts or other approved openings shall be provided to permit access to all filters, flushes, pipes, and downspouts.

P2912.7 Storage tanks. Storage tanks utilized in rainwater nonpotable water systems shall comply with Section P2910.10.

P2912.8 Location. Storage tanks shall be located with a minimum horizontal distance between various elements as indicated in Table P2912.8.1.

Table P2912.8.1 Location of Rainwater Storage Tanks	
Element	Minimum Horizontal Distance from Storage Tank (feet)
Lot line adjoining private lots	5
Sewage systems	5
Septic tanks	5

P2912.9 Valves. Valves shall be installed in collection and conveyance drainage piping of rainwater nonpotable

water systems in accordance with Sections P2912.9.1 and P2912.9.2.

P2912.9.1 Influent diversion. A means shall be provided to divert storage tank influent to allow maintenance and repair of the storage tank system.

P2912.9.2 Backwater valve. Backwater valves shall be installed on each overflow and tank drain pipe to prevent unwanted water from draining back into the storage tank. If the overflow and drain piping arrangement is installed to physically not allow water to drain back into the tank, such as in the form of an air gap, backwater valves shall not be required. Backwater valves shall be constructed and installed in accordance with Section P3008.

P2912.10 Tests and inspections. Tests and inspections shall be performed in accordance with Sections P2912.10.1 and P2912.10.2.

P2912.10.1 Roof gutter inspection and test. Roof gutters shall be inspected to verify that the installation and slope is in accordance with Section P2912.6.1. Gutters shall be tested by pouring a minimum of one gallon of water into the end of the gutter opposite the collection point. The gutter being tested shall not leak and shall not retain standing water.

P2912.10.2 Collection surface diversion test. A collection surface diversion test shall be performed by introducing water into the gutters or onto the collection surface area. Diversion of the first quantity of water in accordance with the requirements of Section P2912.4 shall be verified.

98. 93. Delete Sections P2912.11 through P2912.16, including subsections.

99. 94. Delete Section P2913 in its entirety.

100. 95. Add Section P3002.2.2 to read:

P3002.2.2 Tracer wire. Nonmetallic sanitary sewer piping that discharges to public systems shall be locatable. An insulated copper tracer wire, 18 AWG minimum in size and suitable for direct burial or an equivalent product, shall be utilized. The wire shall be installed in the same trench as the sewer within 12 inches (305 mm) of the pipe and shall be installed from within five feet of the building wall to the point where the building sewer intersects with the public system. At a minimum, one end of the wire shall terminate above grade in an accessible location that is resistant to physical damage, such as with a cleanout or at the building wall.

96. Add Section P3012 Relining Building Sewers and Building Drains.

### 97. Add Sections P3012.1 through P3012.10 to read:

<u>P3012.1</u> General. This section shall govern the relining of existing building sewers and building draining piping.

P3012.2 Applicability. The relining of existing building sewer and building drainage piping shall be limited to gravity drainage piping that is 4 inches (102 mm) in diameter and larger. The relined piping shall be of the same nominal size as the existing piping.

P3012.3 Pre-installation requirements. Prior to commencement of the relining installation, the existing piping sections to be relined shall be descaled and cleaned. After the cleaning process has occurred and water has been flushed through the system, the piping shall be inspected internally by a recorded video camera survey.

P3012.3.1 Pre-installation recorded video camera survey. The video survey shall include verification of the project address location. The video shall include notations of the cleanout and fitting locations, and the approximate depth of the existing piping. The video shall also include notations of the length of piping at intervals no greater than 25 feet.

P3012.4 Permitting. Prior to permit issuance, the code official shall review and evaluate the pre-installment recorded video camera survey to determine if the piping system is capable to be relined in accordance with the proposed lining system manufacturer's installation requirements and applicable referenced standards.

P3012.5 Prohibited applications. Where review of the pre-installation recorded video camera survey reviews that piping systems are not installed correctly or defects exist, relining shall not be permitted. The defective portions of piping shall be exposed and repaired with pipe and fittings in accordance with this code. Defects shall include backgrade or insufficient slope, complete pipe wall deterioration, or complete separations such as from tree root invasion or improper support.

P3012.6 Relining materials. The relining materials shall be manufactured in compliance with applicable standards and certified as required in Section 303. Fold-and-form pipe reline materials shall be manufactured in compliance with ASTM F1504 or ASTM F1871.

<u>P3012.7 Installation. The installation of relining materials shall be performed in accordance with the manufacturer's installation instructions, applicable referenced standards, and this code.</u>

P3012.7.1 Material data report. The installer shall record the data as required by the relining material manufacture and applicable standards. The recorded data shall include the location of the project, relining material type, amount of product installed, and conditions of the installation. A

copy of the data report shall be provided to the code official prior to final approval.

P3012.8 Post-installation recorded video camera survey. The completed relined piping system shall be inspected internally by a recorded video camera survey after the system has been flushed and flow tested with water. The video survey shall be submitted to the code official prior to finalization of the permit. The video survey shall be reviewed and evaluated to provide verification that no defects exist. Any defects identified shall be repaired and replaced in accordance with this code.

P3012.9 Certification. The permit holder shall provide a certification in writing to the code official that the relining materials have been installed in accordance with the manufacturer's installation instructions, the applicable standards, and this code.

P3012.10 Approval. Upon verification of compliance with the requirements of Sections 717.1 through 717.9, the code official shall approve the installation.

101. 98. Add an exception to Section P3301.1 to read:

Exception: Rainwater nonpotable water systems shall be permitted in accordance with the applicable provisions of Sections P2910 and P2912.

99. Delete the exception for Section P3003.9.2.

102. 100. Add Section E3601.8 to read:

E3601.8 Energizing service equipment. The building official shall give permission to energize the electrical service equipment of a one-family or two-family dwelling unit when all of the following requirements have been approved:

- 1. The service wiring and equipment, including the meter socket enclosure, shall be installed and the service wiring terminated.
- 2. The grounding electrode system shall be installed and terminated.
- 3. At least one receptacle outlet on a ground fault protected circuit shall be installed and the circuit wiring terminated.
- 4. Service equipment covers shall be installed.
- 5. The building roof covering shall be installed.
- 6. Temporary electrical service equipment shall be suitable for wet locations unless the interior is dry and protected from the weather.

103. 101. Change Section E3802.4 to read:

E3802.4 In unfinished basements. Where Type SE or NM cable is run at angles with joists in unfinished basements, cable assemblies containing two or more

conductors of sizes 6 AWG and larger and assemblies containing three or more conductors of sizes 8 AWG and larger shall not require additional protection where attached directly to the bottom of the joists. Smaller cables shall be run either through bored holes in joists or on running boards. Type NM or SE cable installed on the wall of an unfinished basement shall be permitted to be installed in a listed conduit or tubing or shall be protected in accordance with Table E3802.1. Conduit or tubing shall be provided with a suitable insulating bushing or adapter at the point the where cable enters the raceway. The sheath of the Type NM or SE cable shall extend through the conduit or tubing and into the outlet or device box not less than 1/4 inch (6.4 mm). The cable shall be secured within 12 inches (305 mm) of the point where the cable enters the conduit or tubing. Metal conduit, tubing, and metal outlet boxes shall be connected to an equipment grounding conductor complying with Section E3908.13.

# 104. 102. Change Section E3902.16 to read:

E3902.16 Arc-fault protection of bedroom outlets. Branch circuits that supply 120-volt, single phase, 15-ampere and 20-ampere outlets installed in bedrooms shall be protected by any of the following:

- 1. A listed combination-type arc-fault circuit interrupter installed to provide protection of the entire branch circuit.
- 2. A listed branch/feeder-type AFCI installed at the origin of the branch-circuit in combination with a listed outlet branch-circuit type arc-fault circuit interrupter installed at the first outlet box on the branch circuit. The first outlet box in the branch circuit shall be marked to indicate that it is the first outlet of the circuit.
- 3. A listed supplemental arc protection circuit breaker installed at the origin of the branch circuit in combination with a listed outlet branch-circuit type arc-fault circuit interrupter installed at the first outlet box on the branch circuit where all of the following conditions are met:
- 3.1. The branch-circuit wiring shall be continuous from the branch-circuit overcurrent device to the outlet branch-circuit arc-fault circuit interrupter.
- 3.2. The maximum length of the branch-circuit wiring from the branch-circuit overcurrent device to the first outlet shall not exceed 50 feet (15.2 m) for 14 AWG conductors and 70 feet (21.3 m) for 12 AWG conductors.
- 3.3. The first outlet box on the branch circuit shall be marked to indicate that it is the first outlet on the circuit.
- 4. A listed outlet branch-circuit type arc-fault circuit interrupter installed at the first outlet on the branch circuit in combination with a listed branch-circuit

overcurrent protective device where all of the following conditions are met:

- 4.1. The branch-circuit wiring shall be continuous from the branch-circuit overcurrent device to the outlet branch-circuit arc-fault circuit interrupter.
- 4.2. The maximum length of the branch-circuit wiring from the branch-circuit overcurrent device to the first outlet shall not exceed 50 feet (15.2 m) for 14 AWG conductors and 70 feet (21.3 m) for 12 AWG conductors.
- 4.3. The first outlet box on the branch circuit shall be marked to indicate that it is the first outlet on the circuit.
- 4.4. The combination of the branch-circuit overcurrent device and outlet branch-circuit AFCI shall be identified as meeting the requirements for a system combination-type AFCI and shall be listed as such.
- 5. Where metal outlet boxes and junction boxes and RMC, IMC, EMT, Type MC or steel-armored Type AC cables meeting the requirements of Section E3908.8, metal wireways or metal auxiliary gutters are installed for the portion of the branch circuit between the branch-circuit overcurrent device and the first outlet, a listed branch-circuit type AFCI installed at the first outlet shall be considered as providing protection for the remaining portion of the branch circuit.
- 6. Where a listed metal or nonmetallic conduit or tubing or Type MC cable is encased in not less than two inches (50.8 mm) of concrete for the portion of the branch circuit between the branch-circuit overcurrent device and the first outlet, a listed outlet branch-circuit type AFCI installed at the first outlet shall be considered as providing protection for the remaining portion of the branch circuit.

#### Exception:

AFCI protection is not required for an individual branch circuit supplying only a fire alarm system where the branch circuit is wired with metal outlet and junction boxes and RMC, IMC, EMT or steel-sheathed armored cable Type AC, or Type MC meeting the requirements of Section E3908.8.

105. 103. Change the referenced standards in Chapter 44 as follows (standards not shown remain the same):

Standard Reference Number	Title	Referenced in Code Section Number
ANSI LC1/CSA 6.26-14 6.26-18	Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing (CSST)	G2411.1, G2411.1.1, G2414.5.3
NSF 50-09	Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities	P2911.6.1
ASTM F1504-14	Standard Specification for Folded/Formed Poly (Vinyl Chloride) (PVC) for Existing Sewer and Conduit Rehabilitation	P3012.4, P3012.6
ASTM F1871-11	Standard Specification for Folded/Formed Poly (Vinyl Chloride) Pipe Type A for Existing Sewer and Conduit Rehabilitation	P3012.4, P3012.6
CSA B805- 18/ICC 805-18	Rainwater Harvesting Systems	<u>P2912.1</u>

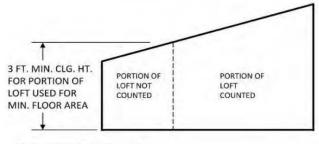
# 104. Change Section AQ104.1.2 to read:

AQ104.1.2 Minimum horizontal dimensions. Lofts shall be not less than 5 feet (1524 mm) in any horizontal dimension.

# 105. Change the exception to Section AQ104.1.3 to read:

Exception: Under gable roofs with a minimum slope of 6 units vertical in 12 units horizontal (50% slope), portions of a loft with a sloped ceiling measuring less than 16 inches (406 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required area for the loft. See Figure AO104.1.3.

106. Add Figure AQ104.1.3 Loft Ceiling Height.



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm

#### Figure AQ104.1.3 Loft Ceiling Height

<u>107. Change Sections AQ104.2, AQ104.2.1, and AQ</u> 104.2.1.2 to read:

AQ104.2 Loft access and egress. The access to and primary egress from lofts shall be of any type described in Sections AQ104.2.1 through AQ104.2.4. The loft access and egress element along its required minimum width shall meet the loft where its ceiling height is not less than 3 feet (914 mm).

AQ104.2.1 Stairways. Stairways accessing lofts shall comply with this code or with Sections AQ104.2.1.1 through AQ104.2.1.7.

AQ104.2.1.2 Headroom. The headroom above stairways accessing a loft shall be not less than 6 feet 2 inches (1880 mm), as measured vertically, from a sloped line connecting the tread, landing, or landing platform nosings in the center of their width, and vertically from the landing platform along the center of its width.

108. Change Sections AQ104.2.1.4 through AQ104.2.1.6 to read:

AQ104.2.1.4 Landings. Intermediate landings and landings at the bottom of stairways shall comply with Section R311.7.6, except that the depth in direction of travel shall be not less than 24 inches (610 mm).

AQ104.2.1.5 Landing platforms. The top tread and riser of stairways accessing lofts shall be constructed as a landing platform where the loft ceiling height is less than 6 feet 2 inches (1880 mm) where the stairway meets the loft. The landing platform shall be not less than 20 inches (508 mm) in width and in depth measured horizontally from and perpendicular to the nosing of the landing platform. The landing platform riser height to the loft floor shall be not less than 16 inches (406 mm) and not greater than 18 inches (457 mm).

AQ104.2.1.6 Handrails. Handrails shall comply with Section R311.7.8.

#### 109. Add Section AO104.2.1.7 to read:

AQ104.2.1.7 Stairway guards. Guards at open sides of stairways, landings, and landing platforms shall comply with Section R312.1.

110. Change Sections AQ 104.2.2.1 and AQ104.2.5 to read:

AQ104.2.2.1 Size and capacity. Ladders accessing lofts shall have a rung width of not less than 12 inches (305 mm), with 10-inch (254 mm) to 14-inch (356 mm) spacing between rungs. Ladders shall be capable of supporting a 300-pound (136 kg) load on any rung. Rung spacing shall be uniform within 3/8 inch (9.5 mm).

AQ104.2.5 Loft Guards. Loft guards shall be located along the open side of lofts. Loft guards shall be not less than 36 inches (914 mm) in height or one-half of the clear height to the ceiling, whichever is less. Loft guards shall comply with Section R312.1.3 and Table R301.5 for their components.

U. T. Add "Marinas" to the list of occupancies in Section 312.1 of the IBC.

# 13VAC5-63-220. Chapter 4 Special detailed requirements based on use and occupancy.

- A. Delete Section 403.4.5 of the IBC.
- B. Change Section 407.4.1.1 of the IBC to read:

407.4.1.1 Special locking arrangement. Means of egress doors shall be permitted to contain locking devices restricting the means of egress in areas in which the clinical needs of the patients require restraint of movement, where all of the following conditions are met:

- 1. The locks release upon activation of the fire alarm system or the loss of power.
- 2. The building is equipped with an approved automatic sprinkler system in accordance with Section 903.3.1.1.
- 3. A manual release device is provided at a nursing station responsible for the area.
- 4. A key-operated switch or other manual device is provided adjacent to each door equipped with the locking device. Such switch or other device, when operated, shall result in direct interruption of power to the lock -- independent of the control system electronics.
- 5. All staff shall have keys or other means to unlock the switch or other device or each door provided with the locking device.
- C. Add Section 407.11 407.12 to the IBC to read:

407.11 407.12 Emergency power systems. Emergency power shall be provided for medical life support equipment, operating, recovery, intensive care, emergency

rooms, fire detection and alarm systems in any Group I-2 occupancy licensed by the Virginia Department of Health as a hospital, nursing home or hospice facility.

- D. Add Section 408.2.1 to the IBC to read:
- 408.2.1 Short-term holding areas. Short-term holding areas shall be permitted to comply with Section 429 431.
- E. Change Section 408.6 of the IBC to read:

408.6 Smoke barrier. Occupancies classified as Group I-3 shall have smoke barriers complying with Sections 408.8 and 709 to divide every story occupied by residents for sleeping, or any other story having an occupant load of 50 or more persons, into no fewer than two smoke compartments.

F. Change Section 408.9 of the IBC and add Sections 408.9.1 through 408.9.3 to the IBC to read:

408.9 Smoke control. Smoke control for each smoke compartment shall be in accordance with Sections 408.9.1 through 408.9.3.

Exception: Smoke compartments with operable windows or windows that are readily breakable.

408.9.1 Locations. An engineered smoke control system shall comply with Section 909 and shall be provided in the following locations:

- 1. Dormitory areas.
- 2. Celled areas.
- 3. General housing areas.
- 4. Intake areas.
- 5. Medical celled or medical dormitory areas.
- 6. Interior recreation areas.

408.9.2 Compliance. The engineered smoke control system shall provide and maintain a tenable environment in the area of origin and shall comply with all of the following:

- 1. Shall facilitate the timely evacuation and relocation of occupants from the area of origin.
- 2. Shall be independent of exhaust systems under Chapter 5 of the IMC.
- 3. Duration of operation in accordance with Section 909.4.6.
- 4. The pressurization method shall be permitted and shall provide a minimum of 24 air changes per hour of exhaust, and 20 air changes per hour of makeup, and shall comply with Section 909.6. If the pressurization method is not utilized, the exhaust method shall be provided and shall comply with Section 909.8.

408.9.3 Corridors. Egress corridors within smoke compartments shall be kept free and clear of smoke.

#### G. Add an exception to Section 414.2 of the IBC to read:

Exception: Higher education teaching and research laboratories shall be permitted to comply with Section 430.

#### H. G. Add Section 414.6.2 to the IBC to read:

414.6.2 Other regulations. The installation, repair, upgrade, and closure of underground and aboveground storage tanks subject to the Virginia State Water Control Board regulations 9VAC25-91 and 9VAC25-580 shall be governed by those regulations, which are hereby incorporated by reference to be an enforceable part of this code. Where differences occur between the provisions of this code and the incorporated provisions of the State Water Control Board regulations, the provisions of the State Water Control Board regulations shall apply. Provisions of the International Fire Code addressing closure of such tanks that are subject to the Virginia State Water Control Board regulations 9VAC25-91 and 9VAC25-580 shall not be applicable.

# H. Change footnote "b" of Table 428.3 of the IBC to read:

b. Shall include walls, floors, ceilings, and construction supporting the floor of the laboratory suite necessary to provide separation from other portions of the building. Fire barriers shall be constructed in accordance with Section 707, and horizontal assemblies shall be constructed in accordance with Section 711.

# I. Delete Section 428.3.3 of the IBC.

#### J. Change Section 428.3.7 of the IBC to read:

428.3.7 Ventilation. Ventilation shall be in accordance with the Virginia Mechanical Code. The design and installation of ducts from chemical fume hoods shall be in accordance with NFPA 91.

# K. Add IBC Section 427 429 to read:

<u>Section 429</u> Manufactured Homes and Industrialized Buildings.

#### J. Add Section 427.1 to the IBC to read:

427.1 429.1 General. The provisions of this section shall apply to the installation or erection of manufactured homes subject to the Virginia Manufactured Home Safety Regulations (13VAC5-95) and industrialized buildings subject to the Virginia Industrialized Building Safety Regulations (13VAC5-91).

Note: Local building departments are also responsible for the enforcement of certain provisions of the Virginia Manufactured Home Safety Regulations (13VAC5-95) and the Virginia Industrialized Building Safety Regulations (13VAC5-91) as set out in those regulations.

#### K. Add Section 427.2 to the IBC to read:

427.2 429.2 Site work for manufactured homes. Footing design, basements, grading, drainage, decks, stoops, porches and utility connections shall comply with the provisions of this code applicable to Group R-5 occupancies. Additionally, all applicable provisions of Chapter 1 of this code, including but not limited to requirements for permits, inspections, certificates of occupancy and requiring compliance, are applicable to the installation and set-up of a manufactured home. Where the installation or erection of a manufactured home utilizes components that are to be concealed, the installer shall notify the building official that an inspection is necessary and assure that an inspection is performed and approved prior to concealment of such components, unless the building official has agreed to an alternative method of verification.

#### L. Add Section 427.2.1 to the IBC to read:

427.2.1 429.2.1 Relocated manufactured homes. Installation, set-up, and site work for relocated manufactured homes shall comply with the provisions of this code and shall include the option of using the manufacturer's installations instructions or the federal Model Manufactured Home Installation Standards (24 CFR Part 3285) for the technical requirements.

### M. Add Section 427.2.2 to the IBC to read:

427.2.2 429.2.2 Alterations and repairs to manufactured homes. Alterations and repairs to manufactured homes shall either be in accordance with federal Manufactured Home Construction and Safety Standards (24 CFR Part 3280) or in accordance with the alteration and repair provisions this code.

### N. Add Section 427.2.3 to the IBC to read:

427.2.3 429.2.3 Additions to manufactured homes. Additions to manufactured homes shall comply with this code and shall be structurally independent of the manufactured home, or when not structurally independent, shall be evaluated by an RDP to determine that the addition does not cause the manufactured home to become out of compliance with federal Manufactured Home Construction and Safety Standards (24 CFR Part 3280).

#### O. Add Section 427.3 to the IBC to read:

427.3 429.3 Wind load requirements for manufactured homes. Manufactured homes shall be anchored to withstand the wind loads established by the federal regulation for the area in which the manufactured home is installed. For the purpose of this code, Wind Zone II of the federal regulation shall include the cities of Chesapeake, Norfolk, Portsmouth, and Virginia Beach.

#### P. Add Section 427.4 to the IBC to read:

427.4 429.4 Skirting requirements for manufactured homes. As used in this section, "skirting" means a weatherresistant material used to enclose the space from the bottom of the manufactured home to grade. In accordance with § 36-99.8 of the Code of Virginia, manufactured homes installed or relocated shall have skirting installed within 60 days of occupancy of the home. Skirting materials shall be durable, suitable for exterior exposures and installed in accordance with the manufacturer's installation instructions. Skirting shall be secured as necessary to ensure stability, to minimize vibrations, to minimize susceptibility to wind damage and to compensate for possible frost heave. Each manufactured home shall have a minimum of one opening in the skirting providing access to any water supply or sewer drain connections under the home. Such openings shall be a minimum of 18 inches (457 mm) in any dimension and not less than three square feet (.28 (0.28 m<sup>2</sup>) in area. The access panel or door shall not be fastened in a manner requiring the use of a special tool to open or remove the panel or door. On-site fabrication of the skirting by the owner or installer of the home shall be acceptable, provided that the material meets the requirements of this code. In addition, as a requirement of this code, skirting for the installation and set-up of a new manufactured home shall also comply with the requirements of 24 CFR Part 3285 - Model Manufactured Home Installation Standards.

#### Q. Add Section 427.5 to the IBC to read:

427.5 429.5 Site work for industrialized buildings. Site work for the erection and installation of an industrialized building shall comply with the manufacturer's installation instructions. To the extent that any aspect of the erection or installation of an industrialized building is not covered by the manufacturer's installation instructions, this code shall be applicable, including the use of the IRC for any construction work where the industrialized building would be classified as a Group R-5 building. In addition, all administrative requirements of this code for permits, inspections, and certificates of occupancy are also applicable. Further, the building official may require the submission of plans and specifications for details of items needed to comprise the finished building that are not included or specified in the manufacturer's instructions, including, but not limited to, footings, foundations, supporting structures, proper anchorage, and completion of the plumbing, mechanical, and electrical systems. Where the installation or erection of an industrialized building utilizes components that are to be concealed, the installer shall notify the building official that an inspection is necessary and assure that an inspection is performed and approved prior to concealment of such components, unless the building official has agreed to an alternative method of verification.

Exception: Temporary family health care structures installed pursuant to § 15.2-2292.1 of the Code of Virginia shall not be required or permitted to be placed on a permanent foundation, but shall otherwise remain subject to all pertinent provisions of this section.

#### R. Add Section 427.6 to the IBC to read:

427.6 429.6 Relocated industrialized buildings; alterations and additions. Industrialized buildings constructed prior to January 1, 1972, shall be subject to Section 117 when relocated. Alterations and additions to any existing industrialized buildings shall be subject to pertinent provisions of this code. Building officials shall be permitted to require the submission of plans and specifications for the model to aid in the evaluation of the proposed alteration or addition. Such plans and specifications shall be permitted to be submitted in electronic or other available format acceptable to the building official.

#### S. Add Section 427.7 to the IBC to read:

427.7 429.7 Change of occupancy of industrialized buildings. Change of occupancy of industrialized buildings is regulated by the Virginia Industrialized Building Safety Regulations (13VAC5-91). When the industrialized building complies with those regulations for the new occupancy, the building official shall issue a new certificate of occupancy under the USBC.

T. L. Add IBC Section 428 430 Aboveground Liquid Fertilizer Tanks- to the IBC to read:

# U. Add Sections 428.1 through 428.6 to the IBC to read:

428.1 430.1 General. This section shall apply to the construction of ALFSTs and shall supersede any conflicting requirements in other provisions of this code. ALFSTs shall also comply with any applicable nonconflicting requirements of this code.

428.1.1 430.1.1 When change of occupancy rules apply. A change of occupancy to use a tank as an ALFST occurs when there is a change in the use of a tank from storing liquids other than liquid fertilizers to a use of storing liquid fertilizer and when the type of liquid fertilizer being stored has a difference of at least 20% of the specific gravity or operating temperature, or both, or a significant change in the material's compatibility.

428.2 430.2 Standards. Newly constructed welded steel ALFSTs shall comply with API 650 and TFI RMIP, as applicable. Newly constructed ALFSTs constructed of materials other than welded steel shall be constructed in accordance with accepted engineering practice to prevent the discharge of liquid fertilizer and shall be constructed of materials that are resistant to corrosion, puncture or cracking. In addition, newly constructed ALFSTs constructed of materials other than welded steel shall

comply with TFI RMIP, as applicable. For the purposes of this code, the use of TFI RMIP shall be construed as mandatory and any language in TFI RMIP, such as, but not limited to, the terms "should" or "may" which indicate that a provision is only a recommendation or a guideline shall be taken as a requirement. ALFSTs shall be placarded in accordance with NFPA 704.

Exception: Sections 4.1.4, 4.2.5, 5.1.2, 5.2.8, 5.3 and 8.1(d)(i) of TFI RMIP shall not be construed as mandatory.

428.3 430.3 Secondary containment. When ALFSTs are newly constructed and when there is a change of occupancy to use a tank as an ALFST, a secondary containment system designed and constructed to prevent any liquid fertilizer from reaching the surface water, groundwater or adjacent land before cleanup occurs shall be provided. The secondary containment system may include dikes, berms or retaining walls, curbing, diversion ponds, holding tanks, sumps, vaults, double-walled tanks, liners external to the tank, or other approved means and shall be capable of holding up to 110% of the capacity of the ALFST as certified by an RDP.

428.4 430.4 Repair, alteration and reconstruction of ALFSTs. Repair, alteration and reconstruction of ALFSTs shall comply with applicable provisions of API 653 and TFI RMIP.

428.5 430.5 Inspection. Applicable inspections as required by and in accordance with API 653 and TFI RMIP shall be performed for repairs and alterations to ALFSTS, the reconstruction of ALFSTs and when there is a change of occupancy to use a tank as an ALFST. When required by API 653 or TFI RMIP, such inspections shall occur prior to the use of the ALFST.

428.6 430.6 Abandoned ALFSTs. Abandoned ALFSTs shall comply with applicable provisions of Section 5704.2.13.2 of the IFC.

V. Add IBC Section 429 Short term Holding Areas.

# W. Add Section 429.1 to the IBC to read:

- 429.1 General. In all groups other than Group E, short term holding areas shall be permitted to be classified as the main occupancy, provided all of the following are met:
  - 1. Provisions are made for the release of all restrained or detained occupants of short term holding areas at all times.
  - 2. Aggregate area of short-term holding areas shall not occupy more than 10% of the building area of the story in which they are located and shall not exceed the tabular values for building area in Table 506.2, without building area increases.
  - 3. Restrained or detained occupant load of each short-term holding area shall not exceed 20.

- 4. Aggregate restrained or detained occupant load in short term holding areas per building shall not exceed 80.
- 5. Compliance with Sections 408.3.7, 408.3.8, 408.4, and 408.7, as would be applicable to I 3 occupancies.
- 6. Requirements of the main occupancy in which short term holding areas are located shall be met.
- 7. Fire areas containing short term holding areas shall be provided with a fire alarm system and automatic smoke detection system complying with Section 907.2.6.3, as would be applicable to I 3 occupancies.
- 8. Where each fire area containing short term holding areas exceeds 12,000 square feet (1115 m²), such fire areas shall be provided with an automatic sprinkler system complying with Section 903.3.
- 9. Short term holding areas shall be separated from other short term holding areas and adjacent spaces by smoke partitions complying with Section 710.

X. Add IBC Section 430 Higher Education Laboratories.

Y. Add Sections 430.1 through 430.4 to the IBC to read:

430.1 Scope. Group B teaching and research laboratories in educational occupancies above the 12th grade complying with the requirements of this section shall be permitted to comply with Table 430.3, 430.4(1), or 430.4(2) without requiring classification as a Group H occupancy. Except as specified in this section, such laboratories shall comply with all applicable provisions of this code. In addition, as set out in Section 5001.7 of the SFPC, approval under this section is contingent upon operational requirements in the SFPC being complied with and maintained.

430.2 Application. The provisions of this section shall be applied as exceptions or additions to applicable requirements of this code.

430.3 Laboratory suite construction. Where laboratory suites are provided, they shall be constructed in accordance with this section. The number of laboratory suites and percentage of maximum allowable quantities of hazardous materials in laboratory suites shall be in accordance with Table 430.3.

430.3.1 Separation from adjacent areas. Laboratory suites shall be separated from other portions of the building in accordance with the most restrictive of either (i) Table 430.3 with fire barriers constructed in accordance with Section 707 and horizontal assemblies constructed in accordance with Section 711 or (ii) Section 508.4. Where individual laboratories within a laboratory suite are separated from each other, the separation shall consist of one hour fire barriers.

Exception: Where an individual laboratory suite occupies more than one story, the fire resistance rating of

intermediate floors contained within the laboratory suite shall comply with the requirements of this code.

430.3.2 Separation from other laboratory suites. Laboratory suites shall be separated from other laboratory suites in accordance with Table 430.3.

430.3.3 Floor assembly fire resistance. The floor assembly supporting the laboratory suite and the construction supporting the floor of the laboratory suite shall have a fire resistance rating of not less than two hours.

Exception: The floor assembly of the laboratory suite and the construction supporting the floor of the laboratory suite are allowed to be one hour fire resistance rated in buildings of Types IIA, IIIA, and VA construction, provided that the building is three or fewer stories.

430.3.4 Maximum number. The maximum number of laboratory suites per floor shall be in accordance with Table 430.3. Where a building contains both laboratory suites complying with Section 430.3 and control areas complying with Section 414.2, the total number of laboratory suites and control areas shall not exceed the maximum number of laboratory suites in accordance with Table 430.3.

430.3.5 Standby or emergency power. Standby or emergency power shall be provided in accordance with Section 414.5.2 where laboratory suites are located above the sixth story above grade plane or located in a story below grade plane.

430.3.6 Ventilation. Ventilation shall be in accordance with the International Mechanical Code. The design and installation of ducts from chemical fume hoods shall be in accordance with NFPA 91.

430.3.7 Liquid tight floor. Portions of the laboratory suite where hazardous materials are present shall be provided with a liquid tight floor.

430.3.8 Automatic fire sprinkler systems. Buildings shall be equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1.

430.3.9 Automatic fire alarm and detection system. Laboratory suites shall be equipped throughout with an automatic fire detection system in accordance with Section 907.2. The building shall be equipped throughout with an automatic fire alarm system in accordance with Section 907.2.

430.3.10 Percentage of maximum allowable quantity in each laboratory suite. The percentage of maximum allowable quantities in each laboratory suite shall be in accordance with Table 430.3.

Table 430.3

Design and Number of Laboratory Suites Per Floor

<del>Floor Level</del>		Percentage of the Maximum Allowable Quantity per Lab Suite*  Ploor Suite*		Fire- Resistance Rating for Fire Barriers in Hours <sup>b</sup>
	<del>21+</del>	5	1	2
	<del>16-20</del>	<del>25</del>	1	2
Above	11-15	<del>50</del>	1	2
Grade Plane	<del>7-10</del>	<del>50</del>	2	2
Plane	4-6	<del>75</del>	4	1
	3	100 6		1
	1-2	100	8	1
	1	<del>75</del>	4	1
Below Grade	2	<del>50</del>	2	1
Plane	Lower than 2	Not Allowed	Not Allowed	Not Allowed

a. Percentage shall be of the maximum allowable quantity per control area shown in Tables 307.1(1) and 307.1(2), with all increases allowed in the notes to those tables.

b. Fire barriers shall include walls, floors, and ceilings necessary to provide separation from other portions of the building.

430.4 Teaching and research laboratories utilizing control areas. Group B teaching and research laboratories in educational occupancies above the 12th grade utilizing control areas are permitted to increase amounts hazardous materials stipulated in Section 414.2 without the laboratories being classified as Group H. The percentage of maximum allowable quantities of hazardous materials per control area and the number of control areas permitted at each floor level within a building shall be permitted to comply with Table 430.4(1) in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or shall be permitted to comply with Table 430.4(2) in buildings not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. In addition, as set out in Section 5001.7 of the SFPC, approval under this section is contingent upon operational requirements in the SFPC being complied with and maintained.

#### Table 430.4(1)

Design and Number of Control Areas in Buildings Equipped Throughout with an Automatic Sprinkler System in Accordance with Section 903.3.1.1 with Group B Teaching and Research Laboratories in Educational Occupancies above the 12th Grade

<del>Floor Level</del>		Percentage of the Maximum Allowable Quantity per Control Area*	Number of Control Areas per Floor	Fire- Resistance Rating for Fire Barriers and Horizontal Assemblies in Hours
	Higher than 20	<del>5</del>	1	2
	11-20	<del>10</del>	1	2
Above Grade	<del>7-10</del>	<del>25</del>	2	2
Plane	4-6	<del>50</del>	2	2
	3	<del>75</del>	3	1
1-2		100	4	1
	1	<del>75</del>	3	1
<del>Below</del> <del>Grade</del>	2	<del>50</del>	2	1
Plane	Lower than 2	Not Allowed	Not Allowed	Not Allowed

a. Percentage shall be of the maximum allowable quantity per control area shown in Tables 307.1(1) and 307.1(2), with all increases allowed in the notes to those tables.

b. Separation shall include fire barriers and horizontal assemblies as necessary to provide separation from other portions of the building.

#### Table 430.4(2)

Design and Number of Control Areas in Buildings Not Equipped Throughout with an Automatic Sprinkler System in Accordance with Section 903.3.1.1 with Group B Teaching and Research Laboratories in Educational Occupancies above the 12th Grade

Floor Level	Percentage of the Maximum Allowable Quantity per Control Area*	Number of Control Areas per Floor	Fire Resistance Rating for Fire Barriers and Horizontal Assemblies in Hours
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	Higher than 9	5	1	2
Above	<del>7-9</del>	<del>10</del>	2	2
<del>Grade</del> <del>Plane</del>	<del>4-6</del>	<del>25</del>	2	2
Tranc	3	<del>75</del>	2	1
	1-2	<del>100</del>	4	1
	1	<del>75</del>	3	1
Below Grade Plane	2	2 50		1
	<del>Lower</del> than 2	Not Allowed	Not Allowed	Not Allowed

a. Percentage shall be of the maximum allowable quantity per control area shown in Tables 307.1(1) and 307.1(2), with all increases allowed in the notes to those tables.

b. Separation shall include fire barriers and horizontal assemblies as necessary to provide separation from other portions of the building.

430.4.1 Separation requirements. Control areas shall be separated from each other and from other non control areas by fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both.

430.4.2 Fire resistance rating requirements. The required fire resistance rating for fire barriers shall be in accordance with Table 430.4(1) in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or in accordance with Table 430.4(2) in buildings not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. The floor assembly of the control area and the construction supporting the floor of the control area shall have a fire-resistance rating in accordance with Table 430.4(1) in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or in accordance with Table 430.4(2) in buildings not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

Exception: The floor assembly of the control area and the construction supporting the floor of the control area are allowed to be one-hour fire resistance rated in buildings of Types IIA, IIIA, and VA construction, provided that the building is three or fewer stories.

430.4.3 Standby or emergency power. Standby or emergency power shall be provided where control areas are located above the sixth floor level above grade plane or located in a floor level below grade plane.

430.4.4 Restricted materials in storage and use. Where approved by the building official, the storage and use of the following hazardous materials prohibited by Table 307.1(1) in buildings not equipped throughout with an

automatic sprinkler system in accordance with Section 903.3.1.1, shall be allowed within a control area at 25% of Table 307.1(1) limits for a building equipped throughout with an automatic sprinkler system:

- 1. Pyrophorics.
- 2. Class 4 oxidizers.

No additional quantity increases shall be allowed. All such materials shall be stored and used in accordance with Section 5001.7 of the SFPC.

430.4.5 Automatic fire alarm and detection system. The building shall be equipped throughout with an automatic fire alarm system in accordance with Section 907.2, and control areas where hazardous materials are used or stored shall be equipped throughout with an automatic fire detection system in accordance with Section 907.2.

430.4.6 Ventilation. Ventilation shall be in accordance with the International Mechanical code.

M. Add Section 431 Short-term Holding Areas to the IBC to read:

- 431.1 General. In all groups other than Group E, short-term holding areas shall be permitted to be classified as the main occupancy, provided all of the following are met:
  - 1. Provisions are made for the release of all restrained or detained occupants of short-term holding areas at all times.
  - 2. Aggregate area of short-term holding areas shall not occupy more than 10% of the building area of the story in which they are located and shall not exceed the tabular values for building area in Table 506.2 without building area increases.
  - 3. Restrained or detained occupant load of each short-term holding area shall not exceed 20.
  - 4. Aggregate restrained or detained occupant load in short-term holding areas per building shall not exceed 80.
  - 5. Compliance with Sections 408.3.7, 408.3.8, 408.4, and 408.7 as applicable for Group I-3 occupancies.
  - 6. Requirements of the main occupancy in which short-term holding areas are located shall be met.
  - 7. Fire areas containing short-term holding areas shall be provided with a fire alarm system and automatic smoke detection system complying with Section 907.2.6.3 as applicable to I-3 occupancies.
  - 8. Where each fire area containing short-term holding areas exceeds 12,000 square feet (1115 m<sup>2</sup>), such fire areas shall be provided with an automatic sprinkler system complying with Section 903.3.

9. Short-term holding areas shall be separated from other short-term holding areas and adjacent spaces by smoke partitions complying with Section 710.

# 13VAC5-63-230. Chapter 7 Fire and smoke protection features.

- A. Change item 5 of Section 703.3 of the IBC to read:
- 5. Alternative protection methods as allowed by Section 112.2.
- B. Change Section 703.7 of the IBC to read:

703.7 Fire-resistance assembly marking. Where there is a concealed floor, floor-ceiling, or attic space, the fire walls, fire barriers, fire partitions, smoke barriers, or any other wall required to have protected openings or penetrations shall be designated above ceilings and on the inside of all ceiling access doors that provide access to such fire rated assemblies by signage having letters no smaller than one inch (25.4 mm) in height. Such signage shall indicate the fire-resistance rating of the assembly and the type of assembly and be provided at horizontal intervals of no more than eight feet (2438 mm).

Note: An example of suggested formatting for the signage would be "ONE HOUR FIRE PARTITION."

B. C. Change the exceptions exception and add an exception to Section 705.2 of the IBC to read:

#### **Exceptions:**

- 1. Buildings on the same lot and considered as portions of one building in accordance with Section 705.3 are not required to comply with this section.
- 2. Decks and open porches of buildings of Groups R-3 and R-4  $\,$
- C. D. Add Exception 4 to Section 706.5.2 of the IBC to read:
  - 4. Decks and open porches of buildings in Groups R-3 and R-4.
- D. E. Change Section 716.5.3.1 716.2.1.4 of the IBC to read:
- 716.5.3.1 716.2.1.4 Smoke and draft control. Fire door assemblies located in smoke barrier walls shall also meet the requirements for a smoke and draft control door assembly tested in accordance with UL 1784. The air leakage rate of the door assembly shall not exceed 3.0 cubic feet per minute per square foot (0.01524 m³/s · m²) of door opening at 0.10 inch (24.9 Pa) of water for both the ambient temperature and elevated temperature tests. Louvers shall be prohibited. Installation of smoke doors shall be in accordance with NFPA 105.

### E. F. Change Section 717.5.3 of the IBC to read:

717.5.3 Shaft enclosures. Shaft enclosures that are permitted to be penetrated by ducts and air transfer openings shall be protected with approved fire and smoke dampers installed in accordance with their listing.

#### **Exceptions:**

- 1. Fire and smoke dampers are not required where steel exhaust subducts extend at least 22 inches (559 mm) vertically in exhaust shafts, provided there is a continuous airflow upward to the outside.
- 2. Fire dampers are not required where penetrations are tested in accordance with ASTM E119 as part of the fire resistance-rated assembly.
- 3. Fire and smoke dampers are not required where ducts are used as part of an approved smoke control system in accordance with Section 909.
- 4. Fire and smoke dampers are not required where the penetrations are in parking garage exhaust or supply shafts that are separated from other building shafts by not less than two-hour fire-resistance-rated construction.
- 5. Smoke dampers are not required where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

#### F. G. Add Section 717.6.2.2 to the IBC to read:

717.6.2.2 Equipment shutdown. Where ceiling radiation dampers are listed as static dampers, the HVAC equipment shall be effectively shut down to stop the airflow prior to the damper closing using one of the following methods:

- 1. A duct detector installed in the return duct.
- 2. An area smoke detector interlocked with the HVAC equipment.
- 3. A listed heat sensor installed in the return duct.

# 13VAC5-63-235. Chapter 8 Interior finishes.

Change Section 806.3 806.2 of the IBC to read:

806.3 806.2 Combustible decorative materials. In other than Group I-3, curtains, draperies, fabric hangings, and similar combustible decorative materials suspended from walls or ceilings shall comply with Section 806.4 and shall not exceed 10% of the specific wall or ceiling area to which it is attached.

Fixed or movable walls and partitions, paneling, wall pads, and crash pads applied structurally or for decoration, acoustical correction, surface insulation, or other purposes shall be considered interior finish, shall comply with Section 803, and shall not be considered decorative materials or furnishings.

### Exceptions:

- 1. In auditoriums or similar types of spaces in Group A, the permissible amount of curtains, draperies, fabric hangings, and similar combustible decorative materials suspended from walls or ceilings shall not exceed 75% of the aggregate wall area where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, and where the material is installed in accordance with Section 803.13 803.15 of this code.
- 2. In auditoriums or similar types of spaces in Group A, the permissible amount of decorative materials suspended from the ceiling, located no more than 12 inches (305 mm) from the wall, not supported by the floor, and meeting the flame propagation performance criteria of NFPA 701, shall not exceed 75% of the aggregate wall area when the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- 3. In Group R-2 dormitories, within sleeping units and dwelling units, the permissible amount of curtains, draperies, fabric hangings, and similar decorative materials suspended from walls or ceiling shall not exceed 50% of the aggregate walls areas where the building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.
- 4. In <u>Groups B</u> and M occupancies, the amount of combustible fabric partitions suspended from the ceiling and not supported by the floor shall comply with Section 806.4 and shall not be limited.

#### 13VAC5-63-240. Chapter 9 Fire protection systems.

A. Add the following to the list of terms in Section 902.1 of the IBC:

Emergency communication equipment.

Emergency public safety personnel.

- B. A. Change Item 2 of Section 903.2.1.2 of the IBC to read:
- 903.2.1.2 Group A 2. An automatic sprinkler system shall be provided for fire areas containing Group A 2 occupancies and intervening floors of the building where one of the following conditions exists:
- 1. The fire area exceeds 5,000 square feet (464.5m<sup>2</sup>).
- 2. The fire area has an occupant load of 100 or more in night clubs or 300 or more in other Group A-2 occupancies.
- 3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
- 4. The fire area contains a multitheater complex.

- C. B. Change Item 2 of Section 903.2.1.3 of the IBC to read:
- 2. In Group A-3 occupancies other than places of religious worship, the fire area has an occupant load of 300 or more.
- D. C. Change Item 1 of Section 903.2.3 of the IBC to read:
- 903.2.3 Group E. An automatic sprinkler system shall be provided for Group E occupancies as follows:
- 1. Throughout all Group E fire areas greater than 20,000 square feet (1858  $m^2$ ) in area.
- 2. Throughout every portion of educational buildings below the lowest level of exit discharge serving that portion of the building.

Exception: An automatic sprinkler system is not required in any area below the lowest level of exit discharge serving that area where every classroom throughout the building has at least one exterior exit door at ground level.

- E. D. Add Exception 4 to Section 903.2.6 to read:
- 4. An automatic sprinkler system shall not be required for open-sided or chain link-sided buildings and overhangs over exercise yards 200 square feet (18.58 m²) or less in Group I-3 facilities, provided such buildings and overhangs are of noncombustible construction.
- F. Change E. Delete Item 4 of Section 903.2.7 of the IBC to read:
  - 903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:
  - 1. A Group M fire area exceeds 12,000 square feet (1115 m<sup>2</sup>).
  - 2. A Group M fire area is located more than three stories above grade plane.
  - 3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).
- G. F. Change Section 903.2.8 of the IBC to read:
- 903.2.8 Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area, except for Group R-2 occupancies listed in the exceptions to this section when the necessary water pressure or volume, or both, for the system is not available:

#### **Exceptions:**

1. Group R-2 occupancies that do not exceed two stories, including basements that are not considered as a story above grade, and with a maximum of 16 dwelling units per fire area. Each dwelling unit shall have at least one door opening to an exterior exit access that leads directly to the exits required to serve that dwelling unit.

- 2. Group R-2 occupancies where all dwelling units are not more than two stories above the lowest level of exit discharge and not more than one story below the highest level of exit discharge of exits serving the dwelling unit and a two-hour fire barrier is provided between each pair of dwelling units. Each bedroom of a dormitory or boarding house shall be considered a dwelling unit under this exception.
- H. Add G. Change Section 903.3.1.2.2 903.3.1.2.3 to the IBC to read:
  - 903.3.1.2.2 903.3.1.2.3 Attics. Sprinkler protection shall be provided for attics in buildings of Type III, IV or V construction in Group R-2 occupancies that are designed or developed and marketed to senior citizens 55 years of age or older and in Group I-1 occupancies in accordance with Section 7.2 of NFPA 13R.
- <u>H. H.</u> Add Section 903.3.5.1.1 to the IBC and change Section 903.3.5.2 of the IBC to Section 903.3.5.1.2; both to read as follows:
  - 903.3.5.1.1 Limited area sprinkler systems. Limited area sprinkler systems serving fewer than 20 sprinklers on any single connection are permitted to be connected to the domestic service where a wet automatic standpipe is not available. Limited area sprinkler systems connected to domestic water supplies shall comply with each of the following requirements:
  - 1. Valves shall not be installed between the domestic water riser control valve and the sprinklers.

Exception: An approved indicating control valve supervised in the open position in accordance with Section 903.4.

- 2. The domestic service shall be capable of supplying the simultaneous domestic demand and the sprinkler demand required to be hydraulically calculated by NFPA 13, NFPA 13R, or NFPA 13D.
- 903.3.5.1.2 Residential combination services. A single combination water supply shall be allowed provided that the domestic demand is added to the sprinkler demand as required by NFPA 13R.
- J. I. Delete Section 903.3.5.2 of the IBC and Sections 903.3.8 through 903.3.8.5 of the IBC.
- K. J. Change Section 903.4.2 of the IBC to read:
- 903.4.2 Alarms. Approved audible devices shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall

actuate the building fire alarm system. Group R-2 occupancies that contain 16 or more dwelling units or sleeping units, any dwelling unit or sleeping unit two or more stories above the lowest level of exit discharge, or any dwelling unit or sleeping unit more than one story below the highest level of exit discharge of exits serving the dwelling unit or sleeping unit shall provide a manual fire alarm box at an approved location to activate the suppression system alarm.

# L. K. Change Section 905.3.1 of the IBC to read:

905.3.1 Height. Class III standpipe systems shall be installed throughout buildings where <u>four or more stories</u> are above or below grade plane, the floor level of the highest story is located more than 30 feet (9144 mm) above the lowest level of fire department vehicle access, or where the floor level of the lowest story is located more than 30 feet (9144 mm) below the highest level of fire department vehicle access.

#### **Exceptions:**

- 1. Class I standpipes are allowed in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.
- 2. Class I manual wet standpipes are allowed in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1 or Section 903.3.2 and where the highest floor is located not more than 150 feet (45,720 mm) above the lowest level of fire department vehicle access.
- 3. Class I manual standpipes are allowed in open parking garages where the highest floor is located not more than 150 feet (45,720 mm) above the lowest level of fire department vehicle access.
- 4. Class I manual dry standpipes are allowed in open parking garages that are subject to freezing temperatures, provided that the hose connections are located as required for Class II standpipes in accordance with Section 905.5.
- 5. Class I standpipes are allowed in basements equipped throughout with an automatic sprinkler system.
- 6. In determining the lowest level of fire department vehicle access, it shall not be required to consider either of the following:
- 6.1. Recessed loading docks for four vehicles or less.
- 6.2. Conditions where topography makes access from the fire department vehicle to the building impractical or impossible.
- M. L. Change Item 1 of Section 906.1 of the IBC to read:
  - 1. In Groups A, B, E, F, H, I, M, R-1, R-4, and S occupancies.

### **Exceptions:**

- 1. In Groups A, B, and E occupancies equipped throughout with quick response sprinklers, portable fire extinguishers shall be required only in locations specified in Items 2 through 6.
- 2. In Group I-3 occupancies, portable fire extinguishers shall be permitted to be located at staff locations and the access to such extinguishers shall be permitted to be locked.

### N. M. Change Section 907.2.1.1 of the IBC to read:

907.2.1.1 System initiation in Group A occupancies with an occupant load of 1,000 or more and in certain night clubs. Activation of the fire alarm in Group A occupancies with an occupant load of 1,000 or more and in night clubs with an occupant load of 300 or more shall initiate a signal using an emergency voice and alarm communications system in accordance with Section 907.5.2.2.

Exception: Where approved, the prerecorded announcement is allowed to be manually deactivated for a period of time, not to exceed three minutes, for the sole purpose of allowing a live voice announcement from an approved, constantly attended location.

#### O. Add Section 907.2.2.2 to the IBC to read:

907.2.2.2 Higher education laboratories. An automatic fire alarm and detection system shall be provided in Group B occupancies where an increase in hazardous materials is permitted in accordance with Section 430.

#### P. N. Change Section 907.2.3 of the IBC to read:

907.2.3 Group E. A manual fire alarm system that activates the occupant notification system meeting the requirements of Section 907.5 and installed in accordance with Section 907.6 shall be installed in Group E occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system.

#### Exceptions:

- 1. A manual fire alarm system is not required in Group E occupancies with an occupant load of 50 or less.
- 2. Manual fire alarm boxes are not required in Group E occupancies where all of the following apply:
- 2.1. Interior corridors are protected by smoke detectors.
- 2.2. Auditoriums, cafeterias, gymnasiums, and similar areas are protected by heat detectors or other approved detection devices.
- 2.3. Shops and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.

- 3. Manual fire alarm boxes shall not be required in Group E occupancies where the building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, the occupant notification system will activate on sprinkler water flow and manual activation is provided from a normally occupied location.
- Q. O. Add an exception to Section 907.5.2.1.1 of the IBC to read:

Exception: Sound pressure levels in Group I-3 occupancies shall be permitted to be limited to only the notification of occupants in the affected smoke compartment.

- P. Delete Exception 1 from Section 907.5.2.3 of the IBC.
- R. Q. Change Section 909.6 of the IBC to read:
- 909.6 Pressurization method. When approved by the building official, the means of controlling smoke shall be permitted by pressure differences across smoke barriers. Maintenance of a tenable environment is not required in the smoke-control zone of fire origin.
- S. R. Change Section 911.1.3 of the IBC to read:
- 911.1.3 Size. The fire command center shall be a minimum of 96 square feet (9 m<sup>2</sup>) in area with a minimum dimension of eight feet (2438 mm).

Exception: Where it is determined by the building official, after consultation with the fire chief official, that specific building characteristics require a larger fire command center, the building official may increase the minimum required size of the fire command center up to 200 square feet (19 m²) in area with a minimum dimension of up to 10 feet (3048 mm).

- S. Delete Section 912.2.2 of the IBC.
- T. Change Sections 912.4 and 912.4.2 of the IBC to read:
- 912.4 Access. Immediate access to fire department connections shall be provided without obstruction by fences, bushes, trees, walls or any other fixed or moveable object. Access to fire department connections shall be approved by the fire chief official.

Exception: Fences, where provided with an access gate equipped with a sign complying with the legend requirements of this section and a means of emergency operation. The gate and the means of emergency operation shall be approved by the fire ehief official.

912.4.2 Clear space around connections. A working space of not less than 36 inches (762 mm) in width, 36 inches (914 mm) in depth and 78 inches (1981 mm) in height shall be provided in front of and to the sides of wall-mounted fire department connections and around the circumference of free-standing fire department

- connections, except as otherwise required or approved by the fire <del>chief</del> official.
- U. Replace Section 915 of the IBC with the following:
- 915.1 Carbon monoxide alarms. Carbon monoxide alarms shall comply with this section.
- 915.2 Group I or R. Group I or R occupancies located in a building containing a fuel-burning appliance or in a building that has an attached garage shall be equipped with single-station carbon monoxide alarms. The carbon monoxide alarms shall be listed as complying with UL 2034 and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions. An open parking garage, as defined in Chapter 2, or an enclosed parking garage ventilated in accordance with Section 404 of the IMC shall not be considered an attached garage.

Exception: Sleeping units or dwelling units that do not themselves contain a fuel-burning appliance or have an attached garage but that are located in a building with a fuel-burning appliance or an attached garage, need not be equipped with single-station carbon monoxide alarms provided that:

- 1. The sleeping unit or dwelling unit is located more than one story above or below any story that contains a fuelburning appliance or an attached garage;
- 2. The sleeping unit or dwelling unit is not connected by duct work or ventilation shafts to any room containing a fuel-burning appliance or to an attached garage; and
- 3. The building is equipped with a common area carbon monoxide alarm system.
- 915.3 Group E. Classrooms in Group E occupancies located in a building containing a fuel-burning appliance or in a building that has an attached garage or small engine or vehicle shop shall be equipped with single-station carbon monoxide alarms. The carbon monoxide alarms shall be listed as complying with UL 2034 and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions. An open parking garage, as defined in Chapter 2, or an enclosed parking garage ventilated in accordance with Section 404 of the IMC shall not be considered an attached garage.

Exception: Classrooms that do not themselves contain a fuel-burning appliance or have an attached garage but are located in a building with a fuel-burning appliance or an attached garage, need not be equipped with single-station carbon monoxide alarms provided that:

1. The classroom is located more than 100 feet from the fuel burning appliance or attached garage or located more than one story above or below any story which contains a fuel-burning appliance or attached garage; and

- 2. The classroom is not connected by duct work or ventilation shafts to any room containing a fuel-burning appliance.
- 915.4 Carbon monoxide detection systems. Carbon monoxide detection systems, which include carbon monoxide detectors and audible notification appliances, installed and maintained in accordance with this section for carbon monoxide alarms and NFPA 720 shall be permitted. The carbon monoxide detectors shall be listed as complying with UL 2075.
- V. Change the title of IBC Section 916 918 to read:

In-Building Emergency Communications Coverage.

W. Change Section 916.1 918.1 of the IBC to read:

916.1 918.1 General. For localities utilizing public safety wireless communications, dedicated infrastructure to accommodate and perpetuate continuous in-building emergency communication equipment to allow emergency public safety personnel to send and receive emergency communications shall be provided in new buildings and structures in accordance with this section.

#### Exceptions:

- 1. Buildings of Use Groups A-5, I-4, within dwelling units of R-2, R-3, R-4, R-5, and U.
- 2. Buildings of Types IV and V construction without basements, that are not considered unlimited area buildings in accordance with Section 507.
- 3. Above grade single story buildings of less than 20,000 square feet.
- 4. Buildings or leased spaces occupied by federal, state, or local governments, or the contractors thereof, with security requirements where the building official has approved an alternative method to provide emergency communication equipment for emergency public safety personnel.
- 5. Where the owner provides technological documentation from a qualified individual that the structure or portion thereof does not impede emergency communication signals.
- 6. Buildings in localities that do not provide the additional communication equipment required for the operation of the system.
- X. Add Sections 916.1.1 918.1.1, 916.1.2 918.1.2, and 916.1.3 918.1.3 to the IBC to read:

916.1.1 918.1.1 Installation. The building owner shall install radiating cable, such as coaxial cable or equivalent. The radiating cable shall be installed in dedicated conduits, raceways, plenums, attics, or roofs, compatible for these specific installations as well as other applicable provisions

of this code. The locality shall be responsible for the installation of any additional communication equipment required for the operation of the system.

916.1.2 918.1.2 Operations. The locality will assume all responsibilities for the operation and maintenance of the emergency communication equipment. The building owner shall provide sufficient operational space within the building to allow the locality access to and the ability to operate in-building emergency communication equipment.

916.1.3 918.1.3 Inspection. In accordance with Section 113.3, all installations shall be inspected prior to concealment.

Y. Add Section 916.2 918.2 to the IBC to read:

916.2 918.2 Acceptance test. Upon completion of installation, after providing reasonable notice to the owner or their representative, emergency public safety personnel shall have the right during normal business hours, or other mutually agreed upon time, to enter onto the property to conduct field tests to verify that the required level of radio coverage is present at no cost to the owner. Any noted deficiencies in the installation of the radiating cable or operational space shall be provided in an inspection report to the owner or the owner's representative.

### 13VAC5-63-245. Chapter 10 Means of egress.

- A. Delete Section 1001.4 1002.2 of the IBC.
- B. Change Section 1004.3 1004.9 of the IBC to read:
- 1004.3 1004.9 Posting of occupant load. Every room or space that is an assembly occupancy and where the occupant load of that room or space is 50 or more shall have the occupant load of the room or space posted for the intended configurations in a conspicuous place, near the main exit or exit access doorway from the room or space. Posted signs shall be of an approved legible permanent design and shall be maintained by the owner or the owner's authorized agent.
- C. Change Exception 1 of Section 1005.3.1 of the IBC to read:
  - 1. For other than Groups H and I-2 occupancies, the capacity, in inches (mm), of means of egress stairways shall be calculated by multiplying the occupant load served by such stairway by a means of egress capacity factor of 0.2 inch (5.1 mm) per occupant in buildings equipped with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
- D. Change Exception 1 of Section 1005.3.2 of the IBC to read:
  - 1. For other than Groups H and I-2 occupancies, the capacity, in inches (mm), of means of egress components other than stairways shall be calculated by multiplying

the occupant load served by such component by a means of egress capacity factor of 0.15 inch (3.8 mm) per occupant in buildings equipped with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

- E. Change Add Exception 4 3 of Section 1006.2.1 of the IBC to read:
  - 4. 3. In Group R-2 and R-3 occupancies, one means of egress is permitted within and from individual dwelling units with a maximum occupant load of 20 where the dwelling unit is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and the common path of egress travel does not exceed 125 feet (38–100 (38,100 mm). This exception shall also apply to Group R-2 occupancies where Section 903.2.8, Exception 1 or 2 is applicable.
- F. Change the number "49" to "50" in the "Maximum Occupant Load of Space" column in the "Ac, E, M," "B," "F," and "U" rows of Table 1006.2.1 of the IBC.
- G. Change the number "49" to "50" in the "Maximum Occupant Load per Story" column of the "A, B<sup>b</sup>, E, F<sup>b</sup>, M, U" row of Table  $\frac{1006.3.2(2)}{1006.3.3(2)}$ .
- H. Change Exception 2 of Section 1007.1.1 of the IBC to read:
  - 2. Where a building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2, the separation distance of the exit doors or exit access doorways shall not be less than one-fourth of the length of the maximum overall diagonal dimension of the area served.
- I. Change Section 1009.6.4 of the IBC to read:

1009.6.4 Separation. Each area of refuge shall be separated from the remainder of the story by a smoke barrier complying with Section 709 or a horizontal exit complying with Section 1026. Each area of refuge shall be designed to minimize the intrusion of smoke.

# **Exceptions:**

- 1. Areas of refuge located within an enclosure for interior exit stairways complying with Section 1023.
- 2. Areas of refuge in outdoor facilities where exit access is essentially open to the outside.
- 3. Areas of refuge where the area of refuge and areas served by the area of refuge are equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
- J. Change Section 1010.1.4.4 of the IBC to read:

1010.1.4.4 Locking arrangements in educational occupancies. In Group E occupancies, except Group E day

- care facilities, and Group B educational occupancies, exit access doors from classrooms, offices, and other occupied rooms, except for exit doors and doors across corridors, shall be permitted to be provided with emergency supplemental hardware where all of the following conditions are met:
  - 1. The door shall be capable of being opened from outside the room with a key, proprietary device provided by the manufacturer, or other approved means.
  - 2. The door shall be openable from within the room in accordance with Section 1010.1.9, except emergency supplemental hardware is not required to comply with Chapter 11.

Note: School officials should consult with their legal counsel regarding provisions of the Americans with Disabilities Act of 1990 (42 USC § 12101 et seq.) and any other applicable requirements.

- 3. Installation of emergency supplemental hardware on fire door assemblies must comply with Section 716.2. Modifications shall not be made to listed panic hardware, fire door hardware, or door closures.
- 4. The emergency supplemental hardware shall not be capable of being used on other doors not intended to be used and shall have at least one component that requires modification to, or is permanently affixed to, the surrounding wall, floor, door, or frame assembly construction for it to properly function.
- 5. Employees shall engage in lockdown training procedures on how to deploy and remove the emergency supplemental hardware, and its use shall be incorporated in the approved lockdown plan complying with the SFPC.
- 6. The emergency supplemental hardware and its components shall be maintained in accordance with the SFPC.
- 7. Approved emergency supplemental hardware shall be of consistent type throughout a building.

Exception: The building official may approve alternate types of emergency supplemental hardware in accordance with Section 110.1 when a consistent device cannot be installed.

K. Add an exception to Sections 1010.1.9 and 1010.1.9.1 of the IBC to read:

Exception: Emergency supplemental hardware provided in accordance with Section 10101.1.4.4.

L. Change Section 1010.1.9.2 of the IBC to read:

1010.1.9.2 Hardware height. Door handles, pulls, latches, locks, and other operating devices shall be installed 34 inches (864 mm) minimum and 48 inches (1219 mm)

maximum above the finished floor. Emergency supplemental hardware provided in accordance with Section 1010.1.4.4, shall be installed 48 inches (1219 mm) maximum above the finished floor. Locks used only for security purposes and not used for normal operation are permitted at any height.

Exception: Access doors or gates in barrier walls and fences protecting pools, spas, and hot tubs shall be permitted to have operable parts of the latch release on self-latching devices at 54 inches (1370 mm) maximum above the finished floor or ground, provided that the self-latching devices are not also self-locking devices operated by means of a key, electronic opener, or integral combination lock.

- $\underline{M}$ . Change Item 2 of Section  $\underline{1010.1.9.3}$   $\underline{1010.1.9.4}$  of the IBC to read:
  - 2. In buildings in occupancy Groups B, F, M and S, the main exterior door or doors are permitted to be equipped with key-operated locking devices from the egress side provided:
    - 2.1. The locking device is readily distinguishable as locked.
    - 2.2. A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED. The sign shall be in letters one inch (25 mm) high on a contrasting background.
    - 2.3. The use of the key-operated locking device is revokable revocable by the building official for due cause.
- N. Add Items 7, 7.1, and 7.2 to Section 1010.1.9.4 of the IBC to read:
  - 7. Egress doors equipped with emergency supplemental hardware complying with Section 1010.1.4.4, from the egress side provided:
    - 7.1. A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS HARDWARE SHALL BE USED BY AUTHORIZED PERSONNEL ONLY. The sign shall be in letters 1 inch (25 mm) high on a contrasting background.
    - 7.2. The use of the emergency supplemental hardware is revocable by the building official or fire official for due cause.
- O. Add Item 6 to Section 1010.1.9.5 of the IBC to read:
- <u>6. Emergency supplemental hardware provided in accordance with Section 1010.1.4.4.</u>

- P. Add Item 5 to Section 1010.1.9.6 of the IBC to read:
- 5. One additional operation shall be permitted for release of emergency supplemental hardware provided in accordance with Section 1010.1.4.4.
- K. Q. Delete Section 1010.1.9.6 1010.1.9.7 of the IBC.
- <u>L. R. Add an exception Exceptions 2 and 3</u> to Section  $1010.1.9.7 \ 1010.1.9.8$  of the IBC to read:

# **Exception** Exceptions:

- <u>2.</u> Approved, listed, delayed egress locks shall be permitted to be installed on doors serving Group A-3 airport facilities, provided they are installed in accordance with this section.
- 3. Emergency supplemental hardware shall not be considered a delayed egress locking system.
- M. S. Change Section 1010.1.6 of the IBC to read:

1010.1.6 Landings at doors. Landings shall have a width not less than the width of the stairway or the door, whichever is greater. Doors in the fully open position shall not reduce a required dimension by more than 7 inches (178 mm). Where a landing serves an occupant load of 50 or more, other doors, gates, or turnstiles in any position shall not reduce the landing to less than one-half its required width nor prevent a door, gate, or turnstile from opening to less than one-half of the required landing width. Landings shall have a length measured in the direction of travel of not less than 44 inches (1118 mm).

Exception: Landing length in the direction of travel in Groups R-3 and U and within individual units of Group R-2 need not exceed 36 inches (914 mm).

N. Change T. Delete Exception 1 and change Exception 2 of Section 1010.1.10 of the IBC to read:

1010.1.10 Panic and fire exit hardware. Doors serving a Group H occupancy and doors serving rooms or spaces with an occupant load of 50 or more in a Group A or E occupancy shall not be provided with a latch or lock other than panic hardware or fire exit hardware.

Exception: Doors serving a provided with panic hardware or fire exit hardware and serving a Group A or E occupancy shall be permitted to be electromagnetically electrically locked in accordance with Section 1010.1.9.9 1010.1.9.10.

O. U. Add Section 1010.1.11 to the IBC to read:

1010.1.11 Locking certain residential sliding doors. In dwelling units of Group R-2 buildings, exterior sliding doors which are one story or less above grade, or shared by two dwelling units, or are otherwise accessible from the outside, shall be equipped with locks. The mounting screws for the lock case shall be inaccessible from the

outside. The lock bolt shall engage the strike in a manner that will prevent it from being disengaged by movement of the door.

Exception: Exterior sliding doors which are equipped with removable metal pins or charlie bars.

P. V. Add Section 1010.1.12 to the IBC to read:

1010.1.12 Door viewers in certain residential buildings. Entrance doors to dwelling units of Group R-2 buildings shall be equipped with door viewers with a field of vision of not less than 180 degrees.

Exception: Entrance doors having a vision panel or side vision panels.

- Q. W. Change Exception 3 of Section 1011.5.2 of the IBC to read:
  - 3. In Group R-3 occupancies; within dwelling units in Group R-2 occupancies; and in Group U occupancies that are accessory to a Group R-3 occupancy or accessory to individual dwelling units in Group R-2 occupancies; the maximum riser height shall be 8.25 inches (210 mm); the minimum tread depth shall be 9 inches (229 mm); the minimum winder tread depth at the walk line shall be 10 inches (254 mm); and the minimum winder tread depth shall be 6 inches (152 mm). A nosing not less than 0.75 inch (19.1 mm) but not more than 1.25 inches (32 mm) shall be provided on stairways with solid risers where the tread depth is less than 11 inches (279 mm).
- R. Change X. Delete Exception 4 from Section 1011.5.2 of the IBC.
- Y. Add Exception 2 to Section 1011.6 of the IBC to read:

1011.6 Stairway landings. There shall be a floor or landing at the top and bottom of each stairway. The width of landings shall be not less than the width of stairways served. Every landing shall have a minimum width measured perpendicular to the direction of travel equal to the width of the stairway. Where the stairway has a straight run the depth need not exceed 48 inches (1219 mm). Doors opening onto a landing shall not reduce the landing to less than one half the required width. When fully open, the door shall not project more than 7 inches (178 mm) into a landing. Where wheelchair spaces are required on the stairway landing in accordance with Section 1009.6.3, the wheelchair space shall not be located in the required width of the landing and doors shall not swing over the wheelchair spaces.

# Exceptions:

1. Where stairways connect stepped aisles to cross aisles or concourses, stairway landings are not required at the transition between stairways and stepped aisles constructed in accordance with Section 1029.

- 2. A floor or landing is not required at the top of an interior flight of exit access stairs within individual dwelling units and sleeping units of Group R-2 occupancies and dwelling units of Group R-3 occupancies, including stairs in an enclosed private garage serving only an individual dwelling unit, provided that a door does not swing over the stairs.
- S. Change Z. Delete Item 6 from Section 1011.16 of the IBC to read:.
  - 1011.16 Ladders. Permanent ladders shall not serve as a part of the means of egress from occupied spaces within a building. Permanent ladders shall be permitted to provide access to the following areas:
    - 1. Spaces frequented only by personnel for maintenance, repair, or monitoring of equipment.
    - 2. Nonoccupiable spaces accessed only by catwalks, erawl spaces, freight elevators, or very narrow passageways.
    - 3. Raised areas used primarily for purposes of security, life safety, or fire safety including observation galleries, prison guard towers, fire towers, or lifeguard stands.
    - 4. Elevated levels in Group U not open to the general public.
  - 5. Nonoccupied roofs that are not required to have stairway access in accordance with Section 1011.12.1.
- T. AA. Change Section 1015.8 of the IBC to read:
- 1015.8 Window openings. Windows in Group Groups R-2 and R-3 buildings including dwelling units where the top of the sill of an operable window opening is located less than 18 inches (457 mm) above the finished floor and more than 72 inches (1829 mm) above the finished grade or other surface below on the exterior of the building shall comply with one of the following:
  - 1. Operable windows where the top of the sill of the opening is located more than 75 feet (22-860) (22,860) mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F 2006.
  - 2. Operable windows where the openings will not allow a 4-inch diameter (102 mm) sphere to pass through the opening when the window is in its largest opened position.
  - 3. Operable windows where the openings are provided with window fall prevention devices that comply with ASTM F 2090.
  - 4. Operable windows that are provided with window opening control devices that comply with Section 1015.8.1.

U. BB. Add Exception 3 to Item 5 of Section 1016.2 of the IBC to read:

3. A maximum of one exit access is permitted to pass through kitchens, store rooms, closets or spaces used for similar purposes provided such a space is not the only means of exit access.

<del>V.</del> <u>CC.</u> Change the following rows and delete footnote "b" in Table 1020.1 of the IBC to read:

Table 1020.1 Corridor Fire-Resistance Rating					
_	Occupant Load	Required Fire- Resistance Rating (hours)			
Occupancy	Served By Corridor	Without sprinkler system	With sprinkler system <sup>b</sup>		
H 1, H 2, H 3	All	Not Permitted	1		
H 4, H 5	Greater than 30	Not Permitted	1		
A, B, E, F, M, S, U	Greater than 30	1	0		
R	Greater than 10	1	0.5		
1-2*, 1-4	All	Not Permitted	0		
I-1, I-3	All	Not Permitted	0		

a. For requirements for occupancies in Group I 2, see Sections 407.2 and 407.3.

b. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 where allowed.

W. DD. Add an additional row to Table 1020.2 of the IBC to read:

Occupancy	Width (minimum)
In corridors of Group I-2 assisted living facilities licensed by the Virginia Department of Social Services serving areas with wheelchair, walker, and gurney traffic where residents are capable of self-preservation or where resident rooms have a means of egress door leading directly to the outside.	44 inches

X. Change EE. Add Exception 2 to Section 1023.5 of the IBC to read:

1023.5 Penetrations. Penetrations into or through interior exit stairways and ramps are prohibited except for equipment and ductwork necessary for independent ventilation or pressurization, sprinkler piping, standpipes, electrical raceway for fire department communication systems, and electrical raceway serving the interior exit stairway and ramp and terminating at a steel box not exceeding 16 square inches (0.010 m²). Such penetrations shall be protected in accordance with Section 714. There shall not be penetrations or communication openings, whether protected or not, between adjacent interior exit stairways and ramps.

#### **Exceptions:**

- 1. Membrane penetrations shall be permitted on the outside of the interior exit stairway and ramp. Such penetrations shall be protected in accordance with Section 714.3.2.
- 2. For buildings in other than Group H, with no more than two stories above grade plane and are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, structural members, other than columns, that are part of the primary structural frame supporting the roof sheathing, roof slab or roof deck only and structural members that are secondary members supporting the roof sheathing, roof slab or roof deck only, shall be permitted to penetrate an interior exit stairway enclosure or a ramp enclosure. Such penetrations shall be protected in accordance with Section 714.
- ¥. FF. Change Section 1023.9 of the IBC to read:

1023.9 Floor identification signs. A sign shall be provided at each floor landing in exit enclosures connecting more than three stories designating the floor level, the terminus of the top and bottom of the exit enclosure and the identification of the stair or ramp by designation with a letter of the alphabet. The signage shall also state the story of, and the direction to, the exit discharge and the availability of roof access from the enclosure for the fire department. The sign shall be located five feet (1524 mm) above the floor landing in a position that is readily visible when the doors are in the open and closed positions. Floor level identification signs in tactile characters complying with ICC A117.1 shall be located at each floor level landing adjacent to the door leading from the enclosure into the corridor to identify the floor level.

Z. Change GG. Add Exception 2 to Section 1024.6 of the IBC to read:

1024.6 Penetrations. Penetrations into or through an exit passageway are prohibited except for equipment and

ductwork necessary for independent pressurization, sprinkler piping, standpipes, electrical raceway for fire department communication and electrical raceway serving the exit passageway and terminating at a steel box not exceeding 16 square inches (0.010 m²). Such penetrations shall be protected in accordance with Section 714. There shall not be penetrations or communicating openings, whether protected or not, between adjacent exit passageways.

# Exceptions:

- 1. Membrane penetrations shall be permitted on the outside of the exit passageway. Such penetrations shall be protected in accordance with Section 714.3.2.
- 2. For buildings in other than Group H, with no more than two stories above grade plane and are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, structural members, other than columns, which are part of the primary structural frame supporting the roof sheathing, roof slab or roof deck only and structural members which are secondary members supporting the roof sheathing, roof slab or roof deck only, shall be permitted to penetrate an interior exit stairway enclosure or a ramp enclosure. Such penetrations shall be protected in accordance with Section 714.

### AA. HH. Change Section 1025.1 of the IBC to read:

1025.1 General. Approved luminous egress path markings delineating the exit path shall be provided in buildings of Groups A, B, E, I, M and R-1 having occupied floors located more than 420 feet (128 016 (128,016 mm) above the lowest level of fire department vehicle access in accordance with Sections 1025.1 through 1025.5 this section.

Exception: Luminous egress path markings shall not be required on the level of exit discharge in lobbies that serve as part of the exit path in accordance with Section 1028.1, Exception 1.

### BB. II. Change Section 1026.2 of the IBC to read:

1026.2 Separation. The separation between buildings or refuge areas connected by a horizontal exit shall be provided by a fire wall complying with Section 706, by a fire barrier complying with Section 707 or a horizontal assembly with Section 711, or by both. The minimum fire-resistance rating of the separation shall be two hours. Opening protectives in horizontal exits shall also comply with Section 716. Duct and air transfer openings in a fire wall or fire barrier that servers as a horizontal exit shall also comply with Section 717. The horizontal exit separation shall extend vertically through all levels of the building unless floor assemblies have a fire-resistance rating of not less than two hours. Openings in horizontal

assemblies on the story served by horizontal exits shall be protected in accordance with Sections 712.1.1, 712.1.3, 712.1.13, and 1019.3.4.

Exception: A fire-resistance rating is not required at horizontal exits between a building area and an above-grade pedestrian walkway constructed in accordance with Section 3104, provided that the distance between connected buildings is more than 20 feet (6096).

Horizontal exits constructed as fire barriers shall be continuous from exterior wall to exterior wall as to divide completely the floor served by the horizontal exit.

# Change Section 1030.1 of the IBC to read:

1030.1 General. In addition to the means of egress required by this chapter, provisions shall be made for emergency escape and rescue openings in Group R 2 occupancies in accordance with Tables 1006.3.2(1) and 1006.3.2(2) and in Group R-3 and R-4 occupancies. Basements and sleeping rooms below the fourth story above grade plane shall have at least one exterior emergency escape and rescue opening in accordance with this section. Where basements contain one or more sleeping rooms, emergency escape and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Such openings shall open directly into a public way or to a yard or court that opens to a public way.

#### **Exceptions:**

- 1. Basements with a ceiling height of less than 80 inches (2032 mm) shall not be required to have emergency escape and rescue openings.
- 2. Emergency escape and rescue openings are not required from basements or sleeping rooms that have an exit door or exit access door that opens directly into a public way or to a yard, court or exterior exit balcony that opens to a public way.
- 3. Basements without habitable spaces and having not more than 200 square feet (18.6 m²) in floor area shall not be required to have emergency escape and rescue openings.
- JJ. Delete the last sentence from Section 1030.5.

#### 13VAC5-63-250. Chapter 11 Accessibility.

A. Add an exception to Section 1101.2 1102.1 of the IBC to read:

Exception: Wall-mounted visible alarm notification appliances in Group I-3 occupancies shall be permitted to be a maximum of 120 inches (3048 mm) above the floor or ground, measured to the bottom of the appliance. Such appliances shall otherwise comply with all applicable requirements.

# B. Change Section to 1103.2.8 of the IBC to read:

1103.2.8 Raised and lowered areas in places of religious worship. Raised or lowered areas, or portions of areas, in places of religious worship are not required to be accessible or to be served by an accessible route, provided such areas are used exclusively primarily for the performance of religious ceremonies and are located within an accessible story or mezzanine.

#### C. Add Section 1103.2.15 to the IBC to read:

1103.2.15 Emergency supplemental hardware. In Group E occupancies, except Group E day care facilities, and Group B educational occupancies, when emergency supplemental hardware is deployed during an active shooter or hostile threat event and provided in accordance with Section 1010.1.4.4.

<u>D.</u> Change Section 1106.1 of the IBC and replace Table 1106.1 of the IBC with Tables 1106.1(1) and 1106.1(2) to read:

1106.1 Required. Where parking is provided, accessible parking spaces shall be provided in compliance with Tables 1106.1(1) and 1106.1(2), as applicable, except as required by Sections 1106.2 through 1106.4. Where more than one parking facility is provided on a site, the number of parking spaces required to be accessible shall be calculated separately for each parking facility. Exception: This section does not apply to parking spaces used exclusively for buses, trucks, other delivery vehicles, lawenforcement vehicles, or vehicular impound and motor pools where lots accessed by the public are provided with an accessible passenger loading zone.

Table 1106.1(1) Accessible Parking Spaces for Groups A, B, E, M, R-1, R-2, and I <sup>a</sup>					
Total Parking Required Minimum Number o Spaces Provided Accessible Spaces					
1 - 25					
26 - 50	2				
51 - 75	51 - 75 3				
76 - 100	100 4				
101 - 125	5				
126 - 150	6				
151 - 200	7				
201 - 300	8				
301 - 400	9				
401 - 500 10					

501 - 1,000	2.33% of total				
1,001 and over	23, plus one for each 100, or fraction thereof, over 1,000				
a. Condominium parking in Group R-2 occupancies					

a. Condominium parking in Group R-2 occupancies where parking is part of the unit purchase shall be in accordance with Table 1106.1(2).

Table 1106.1(2) Accessible Parking Spaces for Groups F, S, H, R-3, R-4, and U					
Total Parking Required Minimum Number of Accessible Spaces					
1 - 25	1				
26 - 50	2				
51 - 75	3				
76 - 100	4				
101 - 150	5				
151 - 200	6				
201 - 300	7				
301 - 400	8				
401 - 500	9				
501 - 1,000	2.0% of total				
1,001 and over	er 20, plus one for each 100, or fraction thereof, over 1,000				

# D. E. Add Section 1106.8 to the IBC to read:

1106.8 Identification of accessible parking spaces. In addition to complying with applicable provisions of this chapter, all accessible parking spaces shall be identified by above grade signs. A sign or symbol painted or otherwise displayed on the pavement of a parking space shall not constitute an above grade sign. All above grade parking space signs shall have the bottom edge of the sign no lower than four feet (1219 mm) nor higher than seven feet (2133 mm) above the parking surface. All disabled parking signs shall include the following language: PENALTY, \$100-500 Fine, TOW-AWAY ZONE. Such language may be placed on a separate sign and attached below existing above grade disabled parking signs, provided that the bottom edge of the attached sign is no lower than four feet above the parking surface.

 $\stackrel{\text{E.}}{=}$  F. Add Sections 1109.16 and 1109.16.1 to the IBC to read:

1109.16 Dwellings containing universal design features for accessibility. Group R-5 occupancies not subject to Section

R320.1 of the IRC and Group R-3 occupancies not subject to Section 1107.6.3 may comply with this section and be approved by the local building department as dwellings containing universal design features for accessibility.

1109.16.1 Standards for dwellings containing universal design features for accessibility. When the following requirements are met, approval shall be issued by the local building department indicating that a dwelling has been constructed in accordance with these standards and is deemed to be a dwelling containing universal design features for accessibility.

- 1. The dwelling must comply with the requirements for Type C units under Section 1005 of ICC A117.1 with the following changes to those requirements:
- 1.1. That at least one bedroom be added to the interior spaces required by Section 1005.4 of ICC A117.1.
- 1.2. In the toilet room or bathroom required by Section 1005 of ICC A117.1, in addition to the lavatory and water closet, a shower or bathtub complying with Section 1004.11.3.2.3 of ICC A117.1 shall be provided and shall include reinforcement for future installation of grab bars in accordance with Section 1004.11.1 of ICC A117.1.
- 1.3. That the exception to Section 1005.4 of ICC A117.1 is not applicable.
- 1.4. That there be a food preparation area complying with Section 1005.7 of ICC A117.1 on the entrance level.
- 1.5. That any thermostat for heating or cooling on the entrance level comply with Section  $\frac{1005.8}{1002.9}$  of ICC A117.1.

F. Change G. Delete the exception for Item 1 of Section 1111.1 of the IBC to read:

1. Accessible parking spaces required by Section 1106.1.

### 13VAC5-63-260. Chapter 12 Interior environment.

A. Add the following to the list of terms in Section 1202.1 of the IBC:

Day night average sound level (Ldn).

Sound transmission class (STC) rating.

B. A. Add Section 1203.5.4 1202.5.4 to the IBC to read:

1203.5.4 1202.5.4 Insect screens in occupancies other than Group R. Every door, window and other outside opening for natural ventilation serving structures classified as other than a residential group containing habitable rooms, food preparation areas, food service areas, or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged, or stored, shall be supplied with approved tightly fitting screens of not less than 16 mesh per inch (16 mesh per 25

mm) and every screen door used for insect control shall have a self-closing device.

Exception: Screen doors shall not be required for out swinging doors or other types of openings which make screening impractical, provided other approved means, such as air curtains or insect repellent fans are provided.

C. B. Add Section 1203.5.5 1202.5.5 to the IBC to read:

1203.5.5 1202.5.5 Insect screens in Group R occupancies. Every door, window and other outside opening required for natural ventilation purposes which serves a structure classified as a residential group shall be supplied with approved tightly fitted screens of not less than 16 mesh per inch (16 mesh per 25 mm) and every screen door used for insect control shall have a self-closing device.

D. C. Add Section 1203.7 1202.7 to the IBC to read:

1203.7 1202.7 Smoking areas in restaurants. Smoking areas in restaurants, as defined in § 15.2-2820 of the Code of Virginia, shall comply with the following:

- 1. The area where smoking may be permitted shall be structurally separated from the portion of the restaurant in which smoking is prohibited. For the purposes of this section, structurally separated means a stud wall covered with drywall or other building material or like barrier, which, when completed, extends from the floor to the ceiling, resulting in a physically separated room. Such wall or barrier may include portions that are glass or other gas-impervious building material and shall be permitted to have a door leading to areas in which smoking is prohibited, provided the door is capable of being closed at all times.
- 2. The area where smoking may be permitted shall be separately vented to prevent the recirculation of air from such area to the area of the restaurant where smoking is prohibited.

Exception: The above requirements do not apply if a restaurant is exempt from, or meets any of the exceptions to, the Virginia Indoor Clean Air Act (Chapter 28.2 of Title 15.2 (§ 15.2-2820 et seq.) of the Code of Virginia).

E. D. Change Section 1207.1 1206.1 of the IBC to read:

1206.1 Scope. Sections 1207.2 1206.2 and 1207.3 1206.3 shall apply to common interior walls, partitions and floor/ceiling floor or ceiling assemblies between adjacent dwelling units or between dwelling units and adjacent public areas such as halls, corridors, stairs or service areas. Section 1207.4 1206.4 applies to the construction of the exterior envelope of Group R occupancies within airport noise zones and to the exterior envelope of Group Groups A, B, E, I and M occupancies in any locality in whose jurisdiction, or adjacent jurisdiction, is located a United States Master Jet Base, a licensed airport or United States

government or military air facility, when such requirements are enforced by a locality pursuant to § 15.2-2295 of the Code of Virginia.

# F. E. Add Section 1207.4 1206.4 to the IBC to read:

1207.4 1206.4 Airport noise attenuation standards. Where the Ldn is determined to be 65 dBA or greater, the minimum STC rating of structure components shall be provided in compliance with Table 1207.4 1206.4. As an alternative to compliance with Table 1207.4 1206.4, structures shall be permitted to be designed and constructed so as to limit the interior noise level to no greater than 45 Ldn. Exterior structures, terrain and permanent plantings shall be permitted to be included as part of the alternative design. The alternative design shall be certified by an RDP.

# G. F. Add Table 1207.4 1206.4 to the IBC to read:

Table <del>1207.4</del> <u>1206.4</u> Airport Noise Attenuation Standards					
Ldn	STC of doors and windows				
65–69	65–69 39				
70–74	44	33			
75 or greater	38				

# 13VAC5-63-264. Chapter 13 Energy efficiency.

Add Section 1301.1.1.1 to the IBC to read:

1301.1.1.1 Changes to the IECC. The following changes shall be made to the IECC:

1. Change the SHGC for Climate Zone 4 (Except Marine) of Table C402.4 to read:

Table C402.4									
	Building Envelope Requirements: Fenestration								
Climate Zone	1	2	3	4 (Except Marine)	5 and Marine 4	6	7	8	
			Vertic	al fenestratio	<del>on</del>				
				<del>U-factor</del>					
Fixed fenestration	0.5 0	0.5 0	0.4 6	0.38	0.38	0.3 6	0.2 9	0.29	
Operable fenestration	<del>0.6</del> <del>5</del>	<del>0.6</del> <del>5</del>	<del>0.6</del> <del>0</del>	0.45	0.45	0.4 3	0.3 7	0.37	
Entrance doors	1.1 0	0.8 3	<del>0.7</del> 7	<del>0.77</del>	0.77	<del>0.7</del> <del>7</del>	<del>0.7</del> <del>7</del>	0.77	
				SHGC					
SHGC	<del>0.2</del> 5	<del>0.2</del> 5	<del>0.2</del> <del>5</del>	0.40 0.36	0.40	0.4 0	0.4 5	0.45	
			<u>(</u>	Skylights					
<del>U-factor</del>	0.7 5	0.6 5	<del>0.5</del> <del>5</del>	0.50	0.50	0.5 0	0.5 0	0.50	
SHGC	0.3 5	0.3 5	0.3 5	0.40	0.40	0.4 0	NR	NR	
NR = No requ	irement.	•			•	•	•	•	

#### 2. Change Section C402.4.3 to read:

C402.4.3 Maximum U-factor and SHGC. The maximum U-factor and solar heat gain coefficient (SHGC) for fenestration shall be as specified in Table C402.4.

The window projection factor shall be determined in accordance with Equation 4-5.

(Equation 4-5)

PF = A/B

where:

PF = Projection factor (decimal).

A = Distance measured horizontally from the farthest continuous extremity of any overhand, eave, or permanently attached shading device to the vertical surface of the glazing.

B = Distance measured vertically from the bottom of the glazing to the underside of the overhang, eave, or permanently attached shading device.

Where different windows or glass doors have different PF values, they shall each be evaluated separately.

Where the fenestration projection factor for a specific vertical fenestration product is greater than or equal to 0.20, the required maximum SHGC from Table C402.4 shall be adjusted by multiplying the required maximum SHGC by the multiplier specified in Table C402.4.3 corresponding with the orientation of the fenestration product and the projection factor.

#### 3. Add Table C402.4.3 to read:

Table C402.4.3			
SHGC Adjustment Multipliers			
Projection factor	All other orientations		
$0.2 \le PF < 0.5$	1.1	1.2	
PF ≤ 0.5	1.2	1.6	

4. Add an exception to the first paragraph of Section C403.2.4.3 403.7.7 to read:

Exception: Any grease duct serving a Type I hood installed in accordance with IMC Section 506.3 shall not be required to have a motorized or gravity damper.

# 5. Add Section C403.2.6.3 C403.2.2.1 to read:

C403.2.6.3 C403.2.2.1 Dwelling unit mechanical ventilation. Mechanical ventilation shall be provided for dwelling units in accordance with the IMC.

6. Delete Section C403.7.5 and Table C403.7.5.

#### 7. Change Section C405.5 C405.4 to read:

C405.5 C405.4 Exterior lighting (Mandatory). All exterior lighting, other than low-voltage landscape lighting, shall comply with Section C405.5.1 C405.4.1.

Exception: Where approved because of historical, safety, signage, or emergency considerations.

#### 7. 8. Change Section R401.2 to read:

R401.2 Compliance. Projects shall comply with all provisions of Chapter 4 labeled "Mandatory" and one of the following:

- 1. Sections R401 through R404.
- 2. Section R405.
- 3. Section R406.
- 4. The most recent version of REScheck, keyed to the 2015 2018 IECC.

Note: See REScheck compliance guidance issued by DHCD, available at the Department's website.

#### 8. Delete 9. Change Section R401.3. to read:

R401.3 A permanent certificate shall be completed by the builder or other approved party and posted on a wall in the space where the furnace is located, a utility room or an approved location inside the building. Where located on an electrical panel, the certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label, or other required labels. Where approved, certificates for multi-family dwelling units shall be permitted to be located off-site at an identified location. The certificate shall indicate the predominant Rvalues of insulation installed in or on ceilings, roofs, walls, foundation components such as slabs, basement walls, crawl space walls and floors, and ducts outside conditioned spaces; U-factors of fenestration and the solar heat gain coefficient (SHGC) of fenestration; and the results from any required duct system and building envelope air leakage testing performed on the building. Where there is more than one value for each component, the certificate shall indicate the value covering the largest area. The certificate shall indicate the types and efficiencies of heating, cooling, and service water heating equipment. Where a gas-fired unvented room heater, electric furnace, or baseboard electric heater is installed in the residence, the certificate shall indicate "gas-fired unvented room heater," "electric furnace," or "baseboard electric heater," as appropriate. An efficiency shall not be indicated for gas-fired unvented room heaters, electric furnaces, and electric baseboard heaters.

9. 10. Change the ceiling R-value and wood frame wall R-value categories for climate zone "4 except Marine" Climate Zone 4 (Except Marine) in Table R402.1.2 to read:

Ceiling R-Value	Wood Frame Wall R-Value
38	15 or 13 + 1 <sup>h</sup>

10. 11. Change the ceiling U-factor and frame wall U-factor categories for elimate zone "4 except Marine" Climate Zone 4 (Except Marine) in Table R402.1.4 to read:

Ceiling U-Factor	Frame Wall U-Factor
0.030	0.079

11. 12. Change Section R402.2.4 to read:

R402.2.4 Access hatches and doors. Access doors from conditioned spaces to unconditioned spaces (e.g., attics and crawl spaces) shall be weatherstripped and insulated in accordance with the following values:

- 1. Hinged vertical doors shall have a minimum overall R-5 insulation value;
- 2. Hatches and scuttle hole covers shall be insulated to a level equivalent to the insulation on the surrounding surfaces; and
- 3. Pull down stairs shall have a minimum of 75% of the panel area having R-5 rigid insulation.

Access shall be provided to all equipment that prevents damaging or compressing the insulation. A wood framed or equivalent baffle or retainer is required to be provided when loose fill insulation is installed, the purpose of which is to prevent the loose fill insulation from spilling into the living space when the attic access is opened and to provide a permanent means of maintaining the installed R-value of the loose fill insulation.

12. 13. Change Sections R402.4 and R402.4.1.1 to read:

R402.4 Air leakage. The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of Sections R402.4.1 through R402.4.4.

R402.4.1.1 Installation (Mandatory). The components of the building thermal envelope as listed in Table R402.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table R402.4.1.1, as applicable to the method of construction. Where required by the code official, an approved third party shall inspect all components and verify compliance.

13. 14. Change the title of the "Insulation Installation Criteria" category of Table R402.4.1.1; change the "Shower/tub on exterior wall" category of Table R402.4.1.1, and add footnotes "b" and "c" to Table R402.4.1.1 to read:

Component	Air Barrier Criteria	Insulation Installation Criteria <sup>b</sup>
Shower/tub on exterior wall <sup>c</sup>	The air barrier installed at exterior walls adjacent to showers and tubs shall be installed on the interior side and separate the exterior walls from the showers and tubs.	Exterior walls adjacent to showers and tubs shall be insulated.

- b. Structural integrity of headers shall be in accordance with the applicable building code.
- c. Air barriers used behind showers and tubs on exterior walls shall be of a permeable material that does not cause the entrapment of moisture in the stud cavity.

44. <u>15.</u> Change Section R402.4.1.2 and add Sections R402.4.1.2.1, R402.4.1.2.2, and R402.4.1.3 to read:

R402.4.1.2 Air sealing. Building envelope air tightness shall be demonstrated to comply with either Section R402.4.1.2.1 or R402.4.1.2.2.

R402.4.1.2.1 Testing option. The building or dwelling unit shall be tested for and verified as having an air leakage rate not exceeding five air changes per hour in Climate Zone 4. Testing shall be conducted in accordance with a blower door at a pressure of 0.2 inches w.g. (50 Pascals) RESNET/ICC 380, ASTM E 779, or ASTM E 1827 and reported at a pressure of 0.2 inch w.g. (50 Pascals). Where required by the building official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the building official. Testing shall be conducted by a Virginia licensed general contractor, a Virginia licensed HVAC contractor, a Virginia licensed home inspector, a Virginia registered design professional, a certified BPI Envelope Professional, a certified HERS rater, or a certified duct and envelope tightness rater. The party conducting the test shall have been trained on the equipment used to perform the test. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

Note: Should additional sealing be required as a result of the test, consideration may be given to the issuance of a temporary certificate of occupancy in accordance with Section 116.1.1.

During testing:

- 1. Exterior windows and doors and fireplace and stove doors shall be closed, but not sealed beyond the intended weatherstripping or other infiltration control measures;
- 2. Dampers, including exhaust, intake, makeup air, backdraft, and flue dampers, shall be closed, but not sealed beyond intended infiltration control measures;
- 3. Interior doors, if installed at the time of the test, shall be open;
- 4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;
- 5. Heating and cooling systems, if installed at the time of the test, shall be turned off; and
- 6. Supply and return registers, if installed at the time of the test, shall be fully open.

R402.4.1.2.2 Visual inspection option. Building envelope tightness shall be considered acceptable when the items listed in Table R402.4.1.1, applicable to the method of construction, are field verified. Where required by the building official, an approved party, independent from the installer, shall inspect the air barrier. When this option is chosen, the dwelling unit shall be ventilated by mechanical means in accordance with Section 403 of the IMC:

R402.4.1.3 Leakage rate (Prescriptive). The building or dwelling unit shall have an air leakage rate not exceeding 5 changes per hour as verified in accordance with Section R402.4.1.2.

15. 16. Change Section R403.3.3 to read:

R403.3.3 Duct testing (Mandatory). Ducts shall be pressure tested to determine air leakage by one of the following methods:

- 1. Rough-in test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure if installed at the time of the test. All registers shall be taped or otherwise sealed during the test.
- 2. Postconstruction test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. Registers shall be taped or otherwise sealed during the test.

Exception: A duct air leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope.

A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. The licensed mechanical contractor installing the mechanical system shall be permitted to perform the duct testing. The contractor shall have been trained on the equipment used to perform the test.

#### 17. Delete Section R403.3.5.

#### 16. 18. Change Section R403.7 to read:

R403.7 Equipment and appliance sizing. Heating and cooling equipment and appliances shall be sized in accordance with ACCA Manual S or other approved sizing methodologies based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies.

Exception: Heating and cooling equipment and appliance sizing shall not be limited to the capacities determined in accordance with Manual S or other approved sizing methodologies where any of the following conditions apply:

- 1. The specified equipment or appliance utilizes multistage technology or variable refrigerant flow technology and the loads calculated in accordance with the approved heating and cooling methodology fall within the range of the manufacturer's published capacities for that equipment or appliance.
- 2. The specified equipment or appliance manufacturer's published capacities cannot satisfy both the total and sensible heat gains calculated in accordance with the approved heating and cooling methodology and the next larger standard size unit is specified.
- 3. The specified equipment or appliance is the lowest capacity unit available from the specified manufacturer.

17. 19. Change footnote "a" in Table R406.4 to read:

Table R406.4			
Maximum Energy Rating Index <sup>a</sup>			
Climate Zone	Energy Rating Index		
1	<del>52</del>		
2	<del>52</del>		
3	51		
4	<del>62</del>		
<del>5</del>	<del>55</del>		
6	<del>5</del> 4		
7 53			
8	<del>53</del>		

a. When onsite renewable energy is included for compliance using the ERI analysis per Section R406.4, the building shall meet the mandatory requirements of Section R406.2 and the building thermal envelope shall be greater than or

equal to levels of energy efficiency and solar heat gain coefficient in Table R402.1.2, with a ceiling R-value of 49 and a wood frame wall R-value of 20 or 13+5, or Table R402.1.4, with a ceiling U-factor of 0.026 and a frame wall U-factor of 0.060.

18. 20. Delete Section R503.1.1.1.

# 13VAC5-63-267. Chapter 14 Exterior walls.

- A. Delete Section <u>1403.5</u> <u>1402.5</u> of the IBC.
- B. Add Section 1403.8 1402.8 to the IBC to read:

1403.8 1402.8 Air barriers. The exterior wall envelope shall be designed and constructed by providing air barriers that comply with the IECC.

C. Change Section 1407.10.4 1406.10.4 of the IBC to read:

1407.10.4 1406.10.4 Full-scale test. The MCM system shall be tested in accordance with, and comply with, the acceptance criteria of NFPA 285. Such testing shall be performed on the MCM system with the MCM in the maximum thickness intended for use. Where noncombustible materials or combustible materials permitted by Sections Section 603, 803, 806, or 1406 differ from assembly to assembly or within an assembly, multiple tests shall not be required.

Exception: The MCM system is not required to be tested in accordance with, and comply with, acceptance criteria of NFPA 285 in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

# 13VAC5-63-268. Chapter 15 Roof assemblies and rooftop structures.

A. Change the title of IBC Section 1511 to read:

Roofing and Roofing Repair.

- B. Change Section 1511.1 of the IBC to read as follows and delete the remainder of Section 1511 of the IBC:
  - 1511.1 General. Materials and methods of application used for reroofing and roof repair shall comply with the applicable requirements of Chapter 15 and the requirements of Section 303 307 of the VEBC.

# 13VAC5-63-270. Chapter 16 Structural design.

A. Change Section 1609.3 of the IBC to read:

1609.3 Basic wind speed. The ultimate design wind speed,  $V_{ult}$ , in miles per hour (mph), for the determination of the wind loads shall be determined by Figures 1609.3(1), 1609.3(2), and 1609.3(3), and 1609.3(4). The ultimate design wind speed,  $V_{ult}$ , for use in the design of Risk Category II buildings and structures shall be obtained from Figure 1609.3(1). The ultimate design wind speed,  $V_{ult}$ , for use in the design of Risk Categories III and IV buildings

and structures shall be obtained from Figure Figures 1609.3(2) and 1609.3(3), respectively. The ultimate design wind speed, V<sub>ult</sub>, for use in the design of Risk Category I buildings and structures shall be obtained from Figure 1609.3(3) 1609.3(4). The ultimate design wind speeds for localities in special wind regions, near mountainous terrains, and near gorges shall be based on elevation. Areas at 4,000 feet in elevation or higher shall use 142 V mph (62.5 m/s) and areas under 4,000 feet in elevation shall use 116 V mph (51 m/s). Gorge areas shall be based on the highest recorded speed per locality or in accordance with local jurisdiction requirements determined in accordance with Section 26.5.1 of ASCE 7.

In nonhurricane-prone regions, when the ultimate design wind speed,  $V_{ult}$ , is estimated from regional climatic data, the ultimate design wind speed,  $V_{ult}$ , shall be determined in accordance with Section 26.5.3 of ASCE 7.

#### B. Add Section 1612.1.1 to the IBC to read:

1612.1.1 Elevation of manufactured homes. New or replacement manufactured homes to be located in any flood hazard zone shall be placed in accordance with the applicable elevation requirements of this code.

Exception: Manufactured homes installed on sites in an existing manufactured home park or subdivision shall be permitted to be placed so that the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches (914 mm) above grade in lieu of being elevated at or above the base flood elevation provided no manufactured home at the same site has sustained flood damage exceeding 50% of the market value of the home before the damage occurred.

#### 13VAC5-63-280. Chapter 17 Special inspections and tests.

A. Change Section 1703.1 of the IBC to read:

1703.1 Approved agency. An approved agency responsible for laboratory testing or special inspections, or both, must comply with the qualification, certification and experience requirements of ASTM E329 or the alternatives listed herein.

B. Change Section 1703.1.1 of the IBC to read:

1703.1.1 Independence. An approved agency shall be objective and competent. The agency shall also disclose possible conflicts of interest so that objectivity can be confirmed. The special inspector and their agents shall be independent from the person, persons or contractor responsible for the physical construction of the project requiring special inspections.

C. Change Section 1703.1.3 of the IBC to read:

1703.1.3 Personnel. An approved agency shall employ experienced personnel educated in conducting, supervising

and evaluating tests or inspections, or both. Upon request by the building official, documentation shall be provided demonstrating the applicable agency's accreditation as noted in ASTM E329 and individuals' resumes indicating pertinent training, certifications and other qualifications for special inspection personnel associated with the proposed construction requiring special inspections. The building official may prescribe the manner of qualification documentation and frequency of updating information regarding agency or individual inspector approval.

Firms providing special inspection services or individual inspectors seeking approval of alternative certifications or qualifications, or both, listed in ASTM E329 may submit documentation demonstrating equivalency. This documentation may include evidence of meeting other recognized standards or alternative certifications to demonstrate that the minimum qualifications, certification and experience intended by ASTM E329 have been met. The building official may, if satisfied that equivalency has been demonstrated, approve the credentials of the firm or individual.

## D. Change Section 1704.2 of the IBC to read:

1704.2 Special inspections. Where application is made for construction as described in this section, the owner shall employ one or more special inspectors to provide inspections and tests during construction on the types of work listed under Section 1705. All individuals or agents performing special inspection functions shall operate under the direct supervision of an RDP in responsible charge of special inspection activities, also known as the "special inspector." The special inspector shall ensure that the individuals under their charge are performing only those special inspections or laboratory testing that are consistent with their knowledge, training and certification for the specified inspection or laboratory testing.

#### **Exceptions:**

- 1. The building official shall be permitted to waive special inspections and tests.
- 2. Special inspections and tests are not required for:
- 2.1. One story buildings under 20 feet (6096 mm) in height which do not exceed  $5000 \, 5,000$  square feet (565 m<sup>2</sup>) in building area; or
- 2.2. Alterations to Group U structures which do not increase loads in accordance with Sections  $\frac{403.3}{603.7.4}$  and  $\frac{603.7.4}{603.7.4}$  of the VEBC.
- 3. Unless otherwise required by the building official, special inspections and tests are not required for occupancies in Groups Group R-3, R-4 or R-5 and occupancies in Group U that are accessory to a residential occupancy including, but not limited to, those listed in Section 312.1.

- 4. Special inspections and tests are not required for portions of structures designed and constructed in accordance with the cold-formed steel light-frame construction provisions of Section 2211.7 2211.1.2 or the conventional light-frame construction provisions of Section 2308.
- 5. The contractor is permitted to employ the approved agencies where the contractor is also the owner.

#### E. Change Section 1704.2.3 of the IBC to read:

1704.2.3 Statement of special inspections. The permit applicant shall submit a statement of special inspections prepared by the RDP in responsible charge in accordance with Section 111.1. This statement shall be in accordance with Section 1704.3.

# Exception:

The statement of special inspections is permitted to be prepared by a qualified person approved by the building official for construction not designed by a registered design professional.

F. Change category "12" of Table 1705.3 of the IBC to read:

Туре	Continuous Special Inspection	Periodic Special Inspection	Referenced Standard <sup>a</sup>	IBC Reference
12. Inspect formwork for shape, location and dimensions of the concrete member being formed, shoring and reshoring.		X	ACI 318: <del>26.10.1(b)</del> 26.11.1.2(b)	1

G. Delete Sections 1705.17, 1705.17.1, and 1705.17.2 of the IBC.

#### 13VAC5-63-295. Chapter 23 Wood.

- A. Change Item Add Exception 2 to Item 2 of Section 2308.2.3 of the IBC to read:
  - 2. Live loads shall not exceed 40 psf (1916 N/m²) for floors-

Exception: 2. Concrete slab-on-grade live load limited only by allowable soil bearing pressure.

#### B. Change Table 2308.4.1.1(1) of the IBC to read:

<u>EDITOR'S NOTE:</u> Table 2308.4.1.1(1), Header and Girder Spans<sup>a, b</sup> for Exterior Bearing Walls, is deleted in its entirety; therefore, the text of Table 2308.4.1.1(1) is not set out.

### C. Change Table 2308.4.1.1(2) of the IBC to read:

<u>EDITOR'S NOTE:</u> Table 2308.4.1.1(2), Header and Girder Spans<sup>a, b</sup> for Interior Bearing Walls, is deleted in its entirety; therefore, the text of Table 2308.4.1.1(2) is not set out.

#### 13VAC5-63-298. Chapter 26 Plastic.

Change Section 2603.5.5 of the IBC to read:

2603.5.5 Vertical and lateral fire propagation. Exterior wall assemblies shall be tested in accordance with, and comply with, acceptance criteria of NFPA 285. Where noncombustible materials or combustible materials permitted by Sections Section 603, 803, 806 or 1406 1405 differ from assembly to assembly or within an assembly, multiple tests shall not be required.

# Exceptions:

- 1. One-story buildings where the exterior wall covering is noncombustible.
- 2. Wall assemblies where the foam plastic insulation is covered on each face by not less than 1-inch (25 mm) thickness of masonry or concrete and meeting one of the following:
- 2.1. There is no air space between the insulation and the concrete or masonry.
- 2.2. The insulation has a flame spread index of not more than 25 as determined in accordance with ASTM E 84 or UL 723 and the maximum air space between the insulation and the concrete or masonry is not more than 1 inch (25 mm).
- 3. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

#### 13VAC5-63-300. Chapter 27 Electrical.

- A. Change Section 2701.1 of the IBC to read:
- 2701.1 Scope. This chapter governs the electrical components, equipment and systems used in buildings and structures covered by this code. Electrical components, equipment and systems shall be designed and constructed in accordance with the provisions of this code and NFPA 70.
- B. Add Section 2701.1.1 to the IBC to read:
- 2701.1.1 Changes to NFPA 70. The following changes shall be made to NFPA 70:
- 1. Change Sections 334.10(2) and 334.10(3) of NFPA 70 to read:
  - (2) Multifamily dwellings not exceeding four floors above grade and multifamily dwellings of any height

- permitted to be of Types III, IV and V construction except in any case as prohibited in 334.12.
- (3) Other structures not exceeding four floors above grade and other structures of any height permitted to be of Types III, IV and V construction except in any case as prohibited in 334.12. In structures exceeding four floors above grade, cables shall be concealed within walls, floors or ceilings that provide a thermal barrier of material that has at least a 15-minute finish rating as identified in listings of fire-rated assemblies.

For the purpose of Items 2 and 3 above, the first floor of a building shall be that floor that has 50% or more of the exterior wall surface area level with or above finished grade. One additional level that is the first level and not designed for human habitation and used only for vehicle parking, storage or similar use shall be permitted.

- 2. Change Section 700.12(F)(2)(6) of NFPA 70 to read:
  - (6) Where the normal power branch circuits that supply luminaires providing illumination immediately on the inside and outside of exit doors are supplied by the same service or feeder, the remote heads providing emergency illumination for the exterior of an exit door shall be permitted to be supplied by the unit equipment serving the area immediately inside the exit door.
- C. Add Section 2701.1.2 to the IBC to read:
- 2701.1.2 Temporary connection to dwelling units. The building official shall give permission to energize the electrical service equipment of a one-family or two-family dwelling unit when all of the following requirements have been approved:
  - 1. The service wiring and equipment, including the meter socket enclosure, shall be installed and the service wiring terminated.
  - 2. The grounding electrode system shall be installed and terminated.
  - At least one receptacle outlet on a ground fault protected circuit shall be installed and the circuit wiring terminated.
  - 4. Service equipment covers shall be installed.
  - 5. The building roof covering shall be installed.
  - 6. Temporary electrical service equipment shall be suitable for wet locations unless the interior is dry and protected from the weather.
- D. Add Section 2701.1.3 to the IBC to read:
- 2701.1.3 Assisted living facility generator requirements. Generators installed to comply with regulations for assisted living facilities licensed by the Virginia Department of

Social Services shall be permitted to be optional standby systems.

E. Change Section 2702.2.17 Sections 2702.2.8 and 2702.2.9 of the IBC to read:

2702.2.17 2702.2.8 Group I-2 and I 3 occupancies. Emergency power shall be provided in accordance with Section 407.10 407.11 for Group I-2 occupancies licensed by the Virginia Department of Health as a hospital, nursing or hospice facility.

<u>2702.2.9 Group I-3 occupancies.</u> Emergency power shall be provided for doors in Group I-3 occupancies in accordance with Section 408.4.2.

### 13VAC5-63-310. Chapter 28 Mechanical systems.

A. Change Section 2801.1 of the IBC to read:

2801.1 Scope. Mechanical appliances, equipment and systems shall be constructed and installed in accordance with this chapter, the IMC and the IFGC. Masonry chimneys, fireplaces and barbecues shall comply with the IMC and Chapter 21 of this code.

Exception: This code shall not govern the construction of water heaters, boilers and pressure vessels to the extent which they are regulated by the Virginia Boiler and Pressure Vessel Regulations (16VAC25-50). However, the building official may require the owner of a structure to submit documentation to substantiate compliance with those regulations.

### B. Add Section 2801.1.1 to the IBC to read:

2801.1.1 Required heating in dwelling units. Heating facilities shall be required in every dwelling unit or portion thereof which is to be rented, leased or let on terms, either expressed or implied, to furnish heat to the occupants thereof. The heating facilities shall be capable of maintaining the room temperature at 65°F (18°C) during the period from October 15 to May 1 during the hours between 6:30 a.m. and 10:30 p.m. of each day and not less than 60°F (16°C) during other hours when measured at a point three feet (914 mm) above the floor and three feet (914 mm) from the exterior walls. The capability of the heating system shall be based on the outside design temperature required for the locality by this code.

#### C. Add Section 2801.1.2 to the IBC to read:

2801.1.2 Required heating in nonresidential structures. Heating facilities shall be required in every enclosed occupied space in nonresidential structures. The heating facilities shall be capable of producing sufficient heat during the period from October 1 to May 15 to maintain a temperature of not less than 65°F (18°C) during all working hours. The required room temperature shall be measured at a point three feet (914 mm) above the floor and three feet (914 mm) from the exterior walls.

Processing, storage and operation areas that require cooling or special temperature conditions and areas in which persons are primarily engaged in vigorous physical activities are exempt from these requirements.

D. Add Section 2801.1.3 to the IBC to read:

2801.1.3 Changes to the IMC. The following changes shall be made to the IMC:

1. Add the following definition to Section 202 of the IMC to read:

Pollution control unit. Manufactured equipment that is installed in a grease exhaust duct system for the purpose of extracting smoke, grease particles, and odors from the exhaust flow by means of a series of filters.

2. 1. Change Section 401.2 of the IMC to read:

401.2 Ventilation required. Every occupied space shall be ventilated by natural means in accordance with Section 402 or by mechanical means in accordance with Section 403. Group R dwelling unit units shall be ventilated by mechanical means in accordance with Section 403. Ambulatory care facilities and Group I-2 occupancies shall be ventilated by mechanical means in accordance with Section 407.

# 3. 2. Change Section 403.3.1.1 of the IMC to read:

403.3.1.1 Outdoor airflow rate. Ventilation systems shall be designed to have the capacity to supply the minimum outdoor airflow rate determined in accordance with this section. In each occupiable space, the ventilation system shall be designed to deliver the required rate of outdoor airflow to the breathing zone. The occupant load utilized for design of the ventilation system shall not be less than the number determined from the estimated maximum occupant load rate indicated in Table 403.3.1.1. Ventilation rates for occupancies not represented in Table 403.3.1.1 shall be those for a listed occupancy classification that is most similar in terms of occupant density, activities and building construction; or shall be determined by an approved engineering analysis. The ventilation system shall be designed to supply the required rate of ventilation air continuously during the period the building is occupied, except as otherwise stated in other provisions of the code.

With the exception of smoking lounges and other designated areas where smoking is permitted, the ventilation rates in Table 403.3.1.1 are based on the absence of smoking in occupiable spaces.

Exception: The occupant load is not required to be determined based on the estimated maximum occupant load rate indicated in Table 403.3.1.1 where approved statistical data document the accuracy of an alternate anticipated occupant density.

4.  $\underline{3}$ . Add and change the following areas in rows to Table 403.3.1.1 of the IMC to read:

OCCUPANCY CLASSIFICATION	Occupant Density #/1000 ft <sup>2 a</sup>	People Outdoor Airflow Rate in Breathing Zone, R <sub>p</sub> cfm/person	Area Outdoor Airflow Rate in Breathing Zone, R <sub>a</sub> cfm/ft <sup>2a</sup>	Exhaust Airflow Rate Cfm/ft <sup>2a</sup>
Food and beverage service				
Bars or cocktail lounges designated as an area where smoking is permitted <sup>b</sup>	100	30		1
Cafeteria or fast food designated as an area where smoking is permitted <sup>b</sup>	100	20		+
Dining rooms designated as an area where smoking is permitted <sup>b</sup>	70	20		+
Public spaces				
Lounges designated as an area where smoking is permitted <sup>b</sup>	100	30		

### 5. 4. Change Section 504.8.2 of the IMC to read:

504.8.2 Duct installation. Exhaust ducts shall be supported at 4-foot (1219 mm) intervals and secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners that protrude into the inside of the duct.

Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation.

6. 5. Change Exception 1 of Section 505.1 505.3 of the IMC to read:

505.1 Domestic systems. Where domestic range hoods and domestic appliances equipped with downdraft exhaust are provided, such hoods and appliances shall discharge to the outdoors through sheet metal ducts constructed of galvanized steel, stainless steel, aluminum, or copper. Such ducts shall have smooth inner walls, shall be air tight, shall be equipped with a backdraft damper, and shall be independent of all other exhaust systems.

#### **Exceptions:**

- 1. In Group R buildings, where installed in accordance with the manufacturer's installation instructions and where mechanical or natural ventilation is otherwise provided in accordance with Chapter 4, listed and labeled ductless range hoods shall not be required to discharge to the outdoors.
- 2. Ducts for domestic kitchen cooking appliances equipped with downdraft exhaust systems shall be permitted to be constructed of Schedule 40 PVC pipe and

fittings provided that the installation complies with all of the following:

- 2.1. The PVC duct shall be installed under a concrete slab poured on grade.
- 2.2. The underfloor trench in which the PVC duct is installed shall be completely backfilled with sand or gravel.
- 2.3. The PVC duct shall extend not more than 1 inch (25 mm) above the indoor concrete floor surface.
- 2.4. The PVC duct shall extend not more than 1 inch (25 mm) above grade outside of the building.
- 2.5. The PVC duct shall be solvent cemented.
- 7. <u>6.</u> Change Section <u>505.4</u> <u>505.6</u> to the IMC to read:

505.4 505.6 Other than Group R. In other than Group R occupancies, where electric domestic cooking appliances are utilized for domestic purposes, such appliances shall be provided with domestic range hoods shall be permitted for such appliances. Hoods and exhaust systems for such electric domestic cooking appliances shall be in accordance with Sections 505.1 505.2 and 505.2 505.4. In other than Group R occupancies, where fuel-fired domestic cooking appliances are utilized for domestic purposes, a Type I or Type II hood shall be provided as required for the type of appliances and processes in accordance with Section 507.1.

# 8. 7. Change Section 506.5 of the IMC to read:

506.5 Exhaust equipment. Exhaust equipment, including fans and grease reservoirs, shall comply with Sections 506.5.1 through 506.5.6 and shall be of an approved design or shall be listed for the application.

- 9. Add 8. Change Section 506.5.6 to 506.5.2, including Items 1, 3, and 5 of the IMC to read: (Items not shown remain the same.)
  - 506.5.6 506.5.2 Pollution control units. The installation of pollution control units shall be in accordance with the manufacturer's installation instructions and all of the following:
  - 1. Pollution control units shall be listed and labeled in accordance with UL 1978 8782.
  - 2. Fans serving pollution control units shall be listed and labeled in accordance with UL 762.
  - 3. Pollution Bracing and supports for pollution control units shall be mounted and secured in accordance with the manufacturer's installation instructions and the of noncombustible material securely attached to the structure and designed to carry gravity and seismic loads within the stress limitations of the International Building Code.
  - 4. Pollution control units located indoors shall be listed and labeled for such use. Where enclosed duct systems, as required by Section 506.3.11, are connected to a pollution control unit, such unit shall be located in a room or space having the same fire resistance rating as the duct enclosure. Access shall be provided for serving and cleaning of the unit. The space or enclosure shall be ventilated in accordance with the manufacturer's installation instructions.
  - 5. A clearance of not less than 18 inches (457 mm) Clearances shall be maintained between the pollution control unit and combustible material in accordance with the listing.
  - 6. Roof mounted pollution control units shall be listed for exterior installation and shall be mounted not less than 18 inches (457 mm) above the roof.
  - 7. Exhaust outlets for pollution control units shall be in accordance with Section 506.3.13.
  - 8. An airflow differential pressure control shall be provided to monitor the pressure drop across the filter sections of a pollution control unit. When the airflow is reduced below the design velocity, the airflow differential pressure control shall activate a visual alarm located in the area where cooking operations occur.
  - Pollution control units shall be provided with a factory installed fire suppression system.
  - 10. Service space shall be provided in accordance with the manufacturer's instructions for the pollution control unit and the requirements of Section 306.
  - 11. Wash down drains shall discharge through a grease interceptor and shall be sized for the flow. Drains shall

- be sealed with a trap or other approved means to prevent air bypass. Where a trap is utilized it shall have a seal depth that accounts for the system pressurization and evaporation between cleanings.
- 12. Protection from freezing shall be provided for the water supply and fire suppression systems where such systems are subject to freezing.
- 13. Duct connections to pollution control units shall be in accordance with Section 506.3.2.3. Where water splash or carryover can occur in the transition duct as a result of a washing operation, the transition duct shall slope downward toward the cabinet drain pan for a length not less than 18 inches (457 mm). Ducts shall transition to the full size of the unit inlet and outlet openings.
- 14. Extra heavy duty appliance exhaust systems shall not be connected to pollution control units except where such units are specifically designed and listed for use with solid fuels.
- 15. Pollution control units shall be maintained in accordance with the manufacturer's instructions.
- 10. 9. Change Section 510.7.1.1 of the IMC to read:
  - 510.7.1.1 Shaft penetrations. Hazardous exhaust ducts that penetrate fire-resistance-rated shafts shall comply with Section 713.11 of the International Building Code.
- 10. Change Section 607.5.5 of the IMC to read:
  - 607.5.5 Shaft enclosures. Shaft enclosures that are permitted to be penetrated by ducts and air transfer openings shall be protected with approved fire and smoke dampers installed in accordance with their listing.

# **Exceptions:**

- 1. Fire and smoke dampers are not required where steel exhaust subducts extend at least 22 inches (559 mm) vertically in exhaust shafts, provided there is a continuous airflow upward to the outside.
- 2. Fire dampers are not required where penetrations are tested in accordance with ASTM E119 as part of the fire-resistance-rated assembly.
- 3. Fire and smoke dampers are not required where ducts are used as part of an approved smoke control system in accordance with Section 909 of the International Building Code.
- 4. Fire and smoke dampers are not required where the penetrations are in parking garage exhaust or supply shafts that are separated from other building shafts by not less than two-hour fire-resistance-rated construction.
- 5. Smoke dampers are not required where the building is equipped throughout with an automatic sprinkler system

in accordance with Section 903.3.1.1 of the International Building Code.

- 11. Add Section 607.6.2.2 to the IMC to read:
  - 607.6.2.2 Equipment shutdown. Where ceiling radiation dampers are listed as static dampers, the HVAC equipment shall be effectively shut down to stop the airflow prior to the damper closing using one of the following methods:
  - 1. A duct detector installed in the return duct.
  - 2. An area smoke detector interlocked with the HVAC equipment.
  - 3. A listed heat sensor installed in the return duct.
- E. Add Section 2801.1.4 to the IBC to read:
  - 2801.1.4 Changes to the IFGC. The following changes shall be made to the IFGC:
  - 1. Change Section 301.1 of the IFGC to read:
    - 301.1 Scope. This code shall apply to the installation of fuel gas piping systems, fuel gas utilization equipment, and related accessories as follows:
    - 1. Coverage of piping systems shall extend from the point of delivery to the connections with gas utilization equipment. (See "point of delivery.")
    - 2. Systems with an operating pressure of 125 psig (862 kPa gauge) or less.

Piping systems for gas-air mixtures within the flammable range with an operating pressure of 10 psig (69 kPa gauge) or less.

- LP-Gas piping systems with an operating pressure of 20 psig (140 kPa gauge) or less.
- 3. Piping systems requirements shall include design, materials, components, fabrication, assembly, installation, testing and inspection.
- 4. Requirements for gas utilization equipment and related accessories shall include installation, combustion and ventilation air and venting.

This code shall not apply to the following:

- 1. Portable LP-Gas equipment of all types that are not connected to a fixed fuel piping system.
- 2. Installation of farm equipment such as brooders, dehydrators, dryers, and irrigation equipment.
- 3. Raw material (feedstock) applications except for piping to special atmosphere generators.
- 4. Oxygen-fuel gas cutting and welding systems.

- 5. Industrial gas applications using gases such as acetylene and acetylenic compounds, hydrogen, ammonia, carbon monoxide, oxygen, and nitrogen.
- 6. Petroleum refineries, pipeline compressor or pumping stations, loading terminals, compounding plants, refinery tank farms, and natural gas processing plants.
- 7. Integrated chemical plants or portions of such plants where flammable or combustible liquids or gases are produced by chemical reactions or used in chemical reactions.
- 8. LP-Gas installations at utility gas plants.
- 9. Liquefied natural gas (LNG) installations.
- 10. Fuel gas piping in power and atomic energy plants.
- 11. Proprietary items of equipment, apparatus, or instruments such as gas generating sets, compressors, and calorimeters.
- 12. LP-Gas equipment for vaporization, gas mixing, and gas manufacturing.
- 13. Temporary LP-Gas piping for buildings under construction or renovation that is not to become part of the permanent piping system.
- 14. Installation of LP-Gas systems for railroad switch heating.
- 15. Installation of LP-Gas and compressed natural gas (CNG) systems on vehicles.
- 16. Except as provided in Section 401.1.1, gas piping, meters, gas pressure regulators, and other appurtenances used by the serving gas supplier in the distribution of gas, other than undiluted LP-Gas.
- 17. Building design and construction, except as specified herein
- 2. Change Sections 310.1 and  $\frac{310.1.1}{200}$  of the IFGC to read:
  - 310.1 Pipe and tubing. Each above-group portion of a gas piping system that is likely to become energized shall be electrically continuous and bonded to an effective ground-fault current path. Gas piping shall be considered to be bonded where it is connected to appliances that are connected to the equipment grounding conductor of the circuit supplying that appliance. Corrugated stainless steel tubing (CSST) piping systems listed with an arc resistant jacket or coating system in accordance with ANSI LC 1/CSA 6.26 shall comply with this section. Where any CSST segments of a piping system are not listed with an arc resistant jacket or coating system in accordance with ANSI LC 1/CSA 6.26, Section 310.1.1 310.2 shall apply.

310.1.1 310.2 CSST without arc resistant jacket or coating system. CSST gas piping systems and piping systems containing one or more segments of CSST not listed with an arc resistant jacket or coating system in accordance with ANSI LC 1/CSA 6.26 shall be bonded to the electrical service grounding electrode system or, where provided, the lightning protection electrode system and shall comply with Sections 310.1.1.1 310.2.1 through 310.1.1.5 310.2.5.

3. Add Section 404.11.3 404.11.6 to the IFGC to read:

404.11.3 404.11.6 Coating application. Joints in gas piping systems shall not be coated prior to testing and approval.

4. Change Section 614.8.2 of the IFGC to read:

614.8.2 Duct installation. Exhaust ducts shall be supported at 4-foot (1219 mm) intervals and secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners that protrude into the inside of the duct.

Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation.

5. Change the following referenced standard in Chapter 8 of the IFGC:

Standard Reference Number	Title	Referenced in Code Section Number
ANSI LC1/CSA 6.26 14 6.26-18	Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing (CSST)	310.1, 310.1.1, 403.5.4
<u>UL8782-17</u>	Outline of Investigation for Pollution Control Units for Commercial Cooking	<u>506.5.2</u>

# 13VAC5-63-320. Chapter 29 Plumbing systems.

A. Change Section 2901.1 of the IBC to read:

2901.1 Scope. The provisions of this chapter and the IPC shall govern the design and installation of all plumbing systems and equipment, except that as provided for in Section 103.5 for functional design, water supply sources and sewage disposal systems are regulated and approved

by the Virginia Department of Health and the Virginia Department of Environmental Quality. The approval of pumping and electrical equipment associated with such water supply sources and sewage disposal systems shall, however, be the responsibility of the building official.

Note: See also the Memorandum of Agreement in the "Related Laws Package," which is available from DHCD.

B. Add Section 2901.1.1 to the IBC to read:

2901.1.1 Changes to the IPC. The following changes shall be made to the IPC:

1. Add the following definitions to the IPC to read:

Nonpotable fixtures and outlets. Fixtures and outlets that are not dependent on potable water for the safe operation to perform their intended use. Such fixtures and outlets may include, but are not limited to water closets, urinals, irrigation, mechanical equipment, and hose connections to perform operations, such as vehicle washing and lawn maintenance.

Nonpotable water systems. Water systems for the collection, treatment, storage, distribution, and use or reuse of nonpotable water. Nonpotable systems include reclaimed water, rainwater, and gray water systems.

Service sink. A general purpose sink exclusively intended to be used for facilitating the cleaning of a building or tenant space.

Stormwater. Precipitation that is discharged across the land surface or through conveyances to one or more waterways and that may include stormwater runoff, snow melt runoff, and surface runoff and drainage.

2. Change the following definitions in the IPC to read:

Gray water. Water discharged from lavatories, bathtubs, showers, clothes washers, and laundry trays.

Rainwater. Natural precipitation, including snow melt, from roof surfaces only.

Reclaimed water. Reclaimed water means water resulting from the treatment of domestic, municipal, or industrial wastewater that is suitable for a water reuse that would not otherwise occur. Specifically excluded from this definition is "gray water."

3. Change the exception to Section 301.3 of the IPC to read:

Exception: Bathtubs, showers, lavatories, clothes washers and laundry trays shall not be required to discharge to the sanitary drainage system where such fixtures discharge to an approved nonpotable gray water system in accordance with the applicable provisions of Chapter 13.

4. Delete <u>Sections Section</u> 311 and 311.1 of the IPC <u>in its</u> entirety.

5. Modify the Group A-5 following Assembly "Description" category of Table 403.1 of the IPC to read:

Stadiums, amusement parks, pools, bleachers, and grandstands for outdoor sporting events and activities <sup>f g</sup>

- 6. Add footnote "f" "g" to Table 403.1 of the IPC to read:
  - £ g. The occupant load for pools shall be in accordance with the "Skating rinks, swimming pools" category of Table 1004.1.2 1004.5 of the IBC.
- 7. Add Section  $403.1.3 \pm 403.1.4$  and Table  $403.1.3 \pm 403.1.4$  to the IPC to read:

403.1.3 403.1.4 Marina fixtures. Notwithstanding any provision to the contrary, plumbing fixtures shall be provided for marinas in the minimum number shown in Table 403.1.3 403.1.4. Fixtures shall be located within 500 feet walking distance from the shore end of any dock they serve. Separate facilities shall be provided for each sex with an equal number of fixtures of each type in each facility, except that separate facilities are not required where the number of slips is less than 25. Urinals may be substituted for up to 50% of water closets.

Table 403.1.3 403.1.4 Minimum Number of Required Plumbing Fixtures for Marinas			
Number	Plumbing Fixtures		
of Slips	Water Closets	Lavatories	Showers
1 - 24	1	1	1
25 - 49	4	4	2
50 - 99	6	4	2
100 - 149	8	6	4
150 - 199	10	8	4
200 - 249	12	10	6
250 or greater	Two additional fixtures of each type for each 100 additional slips.		

- 8. Change Add Exception 2 to Section 403.3.3 of the IPC to read:
  - 403.3.3 Location of toilet facilities in occupancies other than malls. In occupancies other than covered and open mall buildings, the required public and employee toilet facilities shall be located not more than one story above or below the space required to be provided with toilet facilities, and the path of travel to such facilities shall not exceed a distance of 500 feet (152 m).

#### Exceptions:

- 1. The location and maximum distances of travel to required employee facilities in factory and industrial occupancies are permitted to exceed that required by this section, provided that the location and maximum travel distance are approved.
- 2. The location and maximum distances of travel to the required public facilities located on cemetery property are permitted to exceed that required by this section, provided that the location and maximum travel distance are located on the same property and approved.
- 9. Change Add an exception to Section 405.3.2 of the IPC to read:
  - 405.3.2 Public lavatories. In employee and public toilet rooms, the required lavatory shall be located in the same room as the required water closet.

Exception: In educational use occupancies, the required lavatory shall be permitted to be located adjacent to the room or space containing the water closet provided that not more than one operational door is between the water closet and the lavatory.

- 10. Change Section 410.4 of the IPC to read:
- 410.4 Substitution. Where restaurants provide drinking water in a container free of charge, drinking fountains shall not be required in those restaurants. In other occupancies where more than two drinking fountains are required, water dispensers shall be permitted to be substituted for not more than 50% of the required number of drinking fountains.
- 11. Change Section 423.1 of the IPC to read:
  - 423.1 Water connections. Baptisteries, ornamental and lily pools, aquariums, ornamental fountain basins, swimming pools, footbaths and pedicure baths, and similar constructions, where provided with water supplies, shall be protected against backflow in accordance with Section 608.
- 12. Add Section 602.2.1 to the IPC to read:
  - 602.2.1 Nonpotable fixtures and outlets. Nonpotable water shall be permitted to serve nonpotable type fixtures and outlets in accordance with Chapter 13.
- 11. 13. Add Section 603.3 to the IPC to read:
  - 603.3 Tracer wire. Nonmetallic water service piping that connects to public systems shall be locatable. An insulated copper tracer wire, 18 AWG minimum in size and suitable for direct burial or an equivalent product, shall be utilized. The wire shall be installed in the same trench as the water service piping and within 12 inches (305 mm) of the pipe and shall be installed to within five feet (1524 mm) of the building wall to the point where

the building water service pipe intersects with the public water supply. At a minimum, one end of the wire shall terminate above grade to provide access to the wire in a location that is resistant to physical damage, such as with a meter vault or at the building wall.

# 12. Change Section 608.16.10 of the IPC to read:

608.16.10 Coffee machines and noncarbonated beverage dispensers. The water supply connection to coffee machines and noncarbonated beverage dispensers shall be protected against backflow by a backflow preventer conforming to ASSE 1022 or 1024, or by an air gap.

#### 13. Delete Section 701.8 of the IPC.

### 14. Change Section 605.2.1 to read:

605.2.1 Lead content of drinking water pipe and fittings. Pipe, pipe fittings, joints, valves, faucets and fixture fittings utilized to supply water for drinking or cooking purposes shall comply with NSF 372.

# 15. Add Section 703.7 to the IPC to read:

703.7 Tracer wire. Nonmetallic sanitary sewer piping that discharges to public systems shall be locatable. An insulated copper tracer wire, 18 AWG minimum in size and suitable for direct burial or an equivalent product, shall be utilized. The wire shall be installed in the same trench as the sewer within 12 inches (305 mm) of the pipe and shall be installed to within five feet (1524 mm) of the building wall to the point where the building sewer intersects with the public system. At a minimum, one end of the wire shall terminate above grade in an accessible location that is resistant to physical damage, such as with a cleanout or at the building wall.

#### 16. Delete the exception for Section 705.10.2 of the IPC.

- 17. Add Section 717 Relining Building Sewers and Building Drains to the IPC.
- 18. Add Sections 717.1 through 717.10, including subsections, to the IPC to read:
  - 717.1 General. This section shall govern the relining of existing building sewers and building drainage piping.
  - 717.2 Applicability. The relining of existing building sewer and building drainage piping shall be limited to gravity drainage piping, 4 inches (102 mm) in diameter and larger. The relined piping shall be of the same nominal size as the existing piping.
  - 717.3 Pre-installation requirements. Prior to commencement of the relining installation, the existing piping sections to be relined shall be descaled and cleaned. After the cleaning process has occurred and water has been flushed through the system, the piping shall be inspected internally by a recorded video camera survey.

- 717.3.1 Pre-installation recorded video camera survey. The video survey shall include verification of the project address location. The video shall include notations of the cleanout and fitting locations, and the approximate depth of the existing piping. The video shall also include notations of the length of piping at intervals no greater than 25 feet.
- 717.4 Permitting. Prior to permit issuance, the code official shall review and evaluate the pre-installation recorded video camera survey to determine if the piping system is capable to be relined in accordance with the proposed lining system manufacturer's installation requirements and applicable referenced standards.
- 717.5 Prohibited applications. Where review of the preinstallation recorded video camera survey reveals that piping systems are not installed correctly or defects exist, relining shall not be permitted. The defective portions of piping shall be exposed and repaired with pipe and fittings in accordance with this code. Defects shall include backgrade or insufficient slope, complete pipe wall deterioration or complete separations, such as from tree root invasion or improper support.
- 717.6 Relining materials. The relining materials shall be manufactured in compliance with applicable standards and certified as required in Section 303. Fold-and-form pipe reline materials shall be manufactured in compliance with ASTM F1504 or ASTM F1871.
- 717.7 Installation. The installation of relining materials shall be performed in accordance with the manufacturer's installation instructions, applicable referenced standards and this code.
- 717.7.1 Material data report. The installer shall record the data as required by the relining material manufacture and applicable standards. The recorded data shall include the location of the project, relining material type, amount of product installed, and conditions of the installation. A copy of the data report shall be provided to the code official prior to final approval.
- 717.8 Post-installation recorded video camera survey. The completed relined piping system shall be inspected internally by a recorded video camera survey after the system has been flushed and flow-tested with water. The video survey shall be submitted to the code official prior to finalization of the permit. The video survey shall be reviewed and evaluated to provide verification that no defects exist. Any defects identified shall be repaired and replaced in accordance with this code.
- 717.9 Certification. A certification shall be provided in writing to the code official, from the permit holder, that the relining materials have been installed in accordance with the manufacturer's installation instructions, the applicable standards, and this code.

717.10 Approval. Upon verification of compliance with the requirements of Sections 717.1 through 717.9, the code official shall approve the installation.

45. 19. Add an exception to Section 1101.2 of the IPC to read:

Exception. Rainwater nonpotable water systems shall be permitted in accordance with Chapter 13.

20. Delete the last sentence from Section 1101.7 of the IPC.

### 21. Delete Section 1105.2 of the IPC.

16. 22. Change Section 1106.2 of the IPC to read:

1106.2 Vertical conductors and leaders. Vertical conductors and leaders shall be sized for the maximum projected roof area, in accordance with Tables 1106.2(1) and 1106.2(2).

17. 23. Delete Table 1106.2 of the IPC and add Tables 1106.2(1) and 1106.2(2) to the IPC to read:

	Table 1106.2(1) Size of Circular Vertical Conductors and Leaders											
	Horizontally Projected Roof Area (square feet)											
Diameter of Leader	Rainfall rate (inches per hour)											
(inches <sup>a</sup> )	1	2	3	4	5	6	7	8	9	10	11	12
2	2,280	1,440	960	720	575	480	410	360	320	290	260	240
3	8,800	4,400	2,930	2,200	1,760	1,470	1,260	1,100	980	880	800	730
4	18,400	9,200	6,130	4,600	3,680	3,070	2,630	2,300	2,045	1,840	1,675	1,530
5	34,600	17,300	11,530	8,650	6,920	5,765	4,945	4,325	3,845	3,460	3,145	2,880
6	54,000	27,000	17,995	13,500	10,800	9,000	7,715	6,750	6,000	5,400	4,910	4,500
8	116,000	58,000	38,660	29,000	23,200	19,315	16,570	14,500	12,890	11,600	10,545	9,600

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m<sup>2</sup>.

Table 1106.2(2)

	Size of Rectangular Vertical Conductors and Leaders											
Dimensions of		Horizontally Projected Roof Area (square feet)										
Common Leader Sizes		Rainfall rate (inches per hour)										
width x length (inches) <sup>a,b</sup>	1	2	3	4	5	6	7	8	9	10	11	12
1-3/4 x 2-1/2	3,410	1,700	1,130	850	680	560	480	420	370	340	310	280
2 x 3	5,540	2,770	1,840	1,380	1,100	920	790	690	610	550	500	460
2-3/4 x 4-1/4	12,830	6,410	4,270	3,200	2,560	2,130	1,830	1,600	1,420	1,280	1,160	1,060
3 x 4	13,210	6,600	4,400	3,300	2,640	2,200	1,880	1,650	1,460	1,320	1,200	1,100
3-1/2 x 4	15.900	7,950	5,300	3,970	3,180	2,650	2,270	1,980	1,760	1,590	1,440	1,320
3-1/2 x 5	21,310	10,650	7,100	5,320	4,260	3,550	3,040	2,660	2,360	2,130	1,930	1,770
3-3/4 x 4-3/4	21,960	10,980	7,320	5,490	4,390	3,660	3,130	2,740	2,440	2,190	1,990	1,830
3-3/4 x 5-1/4	25,520	12,760	8,500	6,380	5,100	4,250	3,640	3,190	2,830	2,550	2,320	2,120
3-1/2 x 6	27,790	13,890	9,260	6,940	5,550	4,630	3,970	3,470	3,080	2,770	2,520	2,310
4 x 6	32,980	16,490	10,990	8,240	6,590	5,490	4,710	4,120	3,660	3,290	2,990	2,740
5-1/2 x 5-1/2	44,300	22,150	14,760	11,070	8,860	7,380	6,320	5,530	4,920	4,430	4,020	3,690

100,500

50,250

33,500

25,120

7-1/2 x 7-1/2

20,100

9,130

8,370

16,750

14,350

12,560

11,160

10,050

a. Sizes indicated are the diameter of circular piping. This table is applicable to piping of other shapes, provided the cross-sectional shape fully enclosed a circle of the diameter indicated in this table. For rectangular leaders, see Table 1106.2(2). Interpolation is permitted for pipe sizes that fall between those listed in this table.

For SI: 1 inch =m, 1 square foot =  $0.0929 \text{ m}^2$ .

a. Sizes indicated are nominal width x length of the opening for rectangular piping.

b. For shapes not included in this table, Equation 11-1 shall be used to determine the equivalent circular diameter, De, of rectangular piping for use in interpolation using the data from Table 1106.2(1).

(Equation 11-1)

 $De = (width \ x \ length)1/2$ 

where:

De = equivalent circular diameter and De, width and length are in inches.

## 18. 24. Change Section 1106.3 and Table 1106.3 of the IPC to read:

1106.3 Building storm drains and sewers. The size of the building storm drain, building storm sewer and their horizontal branches having a slope of 1/2 unit or less vertical in 12 units horizontal (4% slope) shall be based on the maximum projected roof area in accordance with Table 1106.3. The slope of horizontal branches shall be not less than 1/8 unit vertical in 12 units horizontal (1% slope) unless otherwise approved.

		Size of Hor	Table 1106.3 rizontal Storm Drain	age Piping				
Size of	Horizontally Projected Roof Area (square feet)							
Horizontal	Rainfall rate (inches per hour)							
Piping (inches)	1	2	3	4	5	6		
1/8 unit vertical in 12 units horizontal (1% slope)								
3	3,288	1,644	1,096	822	657	548		
4	7,520	3,760	2,506	1,800	1,504	1,253		
5	13,360	6,680	4,453	3,340	2,672	2,227		
6	21,400	10,700	7,133	5,350	4,280	3,566		
8	46,000	23,000	15,330	11,500	9,200	7,600		
10	82,800	41,400	27,600	20,700	16,580	13,800		
12	133,200	66,600	44,400	33,300	26,650	22,200		
15	218,000	109,000	72,800	59,500	47,600	39,650		
1/4 unit vertical in 12 units horizontal (2% slope)								
3	4,640	2,320	1,546	1,160	928	773		
4	10,600	5,300	3,533	2,650	2,120	1,766		
5	18,880	9,440	6,293	4,720	3,776	3,146		
6	30,200	15,100	10,066	7,550	6,040	5,033		
8	65,200	32,600	21,733	16,300	13,040	10,866		
10	116,800	58,400	38,950	29,200	23,350	19,450		
12	188,000	94,000	62,600	47,000	37,600	31,350		
15	336,000	168,000	112,000	84,000	67,250	56,000		
		1/2 unit vertica	l in 12 units horizon	tal (4% slope)				
3	6,576	3,288	2,295	1,644	1,310	1,096		
4	15,040	7,520	5,010	3,760	3,010	2,500		
5	26,720	13,360	8,900	6,680	5,320	4,450		
6	42,800	21,400	13,700	10,700	8,580	7,140		
8	92,000	46,000	30,650	23,000	18,400	15,320		
10	171,600	85,800	55,200	41,400	33,150	27,600		
12	266,400	133,200	88,800	66,600	53,200	44,400		
15	476,000	238,000	158,800	119,000	95,300	79,250		

19. 25. Change Section 1106.6 and Table 1106.6 of the IPC to read:

1106.6 Size of roof gutters. The size of semicircular gutters shall be based on the maximum projected roof area in accordance with Table 1106.6.

			Table 1106.6					
		Size of	Semicircular Roof G	utters				
	Horizontally Projected Roof Area (square feet)							
Diameter of Gutters (inches)			Rainfall rate (in	iches per hour)				
	1	2	3	4	5	6		
		1/16 unit vertica	l in 12 units horizont	al (0.5% slope)				
3	680	340	226	170	136	113		
4	1,440	720	480	360	288	240		
5	2,500	1,250	834	625	500	416		
6	3,840	1,920	1,280	960	768	640		
7	5,520	2,760	1,840	1,380	1,100	918		
8	7,960	3,980	2,655	1,990	1,590	1,325		
10	14,400	7,200	4,800	3,600	2,880	2,400		
		1/8 unit vertica	d in 12 units horizont	al (1% slope)				
3	960	480	320	240	192	160		
4	2,040	1,020	681	510	408	340		
5	3,520	1,760	1,172	880	704	587		
6	5,440	2,720	1,815	1,360	1,085	905		
7	7,800	3,900	2,600	1,950	1,560	1,300		
8	11,200	5,600	3,740	2,800	2,240	1,870		
10	20,400	10,200	6,800	5,100	4,080	3,400		
		1/4 unit vertica	l in 12 units horizont	al (2% slope)				
3	1,360	680	454	340	272	226		
4	2,880	1,440	960	720	576	480		
5	5,000	2,500	1,668	1,250	1,000	834		
6	7,680	3,840	2,560	1,920	1,536	1,280		
7	11,040	5,520	3,860	2,760	2,205	1,840		
8	15,920	7,960	5,310	3,980	3,180	2,655		
10	28,800	14,400	9,600	7,200	5,750	4,800		
		1/2 unit vertica	d in 12 units horizont	al (4% slope)				
3	1,920	960	640	480	384	320		
4	4,080	2,040	1,360	1,020	816	680		
5	7,080	3,540	2,360	1,770	1,415	1,180		
6	11,080	5,540	3,695	2,770	2,220	1,850		
7	15,600	7,800	5,200	3,900	3,120	2,600		
8	22,400	11,200	7,460	5,600	4,480	3,730		
10	40,000	20,000	13,330	10,000	8,000	6,660		
For SI: 1 inch = 25.4	4 mm, 1 square foo	$t = 0.0929 \text{ m}^2.$				•		

<u>26. Add Section 1114 Values for Continuous Flow to the IPC.</u>

## 27. Add Section 1114.1 to the IPC to read:

1114.1 Equivalent roof area. Where there is a continuous or semicontinuous discharge into the building storm drain or building storm sewer, such as from a pump, ejector, air conditioning plant, or similar device, each gallon per minute (L/m) of such discharge shall be computed as being equivalent to 96 square feet (9 m²) of

roof area, based on a rainfall rate of 1 inch (25.4 mm) per hour.

20. 28. Change Sections 1301.1 through 1301.12 and add Sections 1301.13 through 1301.18, including subsections, to the IPC to read:

1301.1 Scope. The provisions of Chapter 13 shall govern the materials, design, construction, and installation of nonpotable water systems subject to this code. In addition to the applicable provision of this section,

reclaimed water shall comply with the requirements of Section 1304.

1301.1.1 Design of nonpotable water systems. All portions of nonpotable water systems subject to this code shall be constructed using the same standards and requirements for the potable water systems or drainage systems as provided for in this code unless otherwise specified in this chapter.

1301.2 Makeup water. Makeup water shall be provided for all nonpotable water supply systems. The makeup water system shall be designed and installed to provide supply of water in the amounts and at the pressures specified in this code. The makeup water supply shall be potable and be protected against backflow in accordance with the applicable requirements of Section 608.

1301.2.1 Makeup water sources. Potable water shall be provided as makeup water for reclaimed water systems. Nonpotable water shall be permitted to serve as makeup water for gray water and rainwater systems.

1301.2.2 Makeup water supply valve. A full-open valve shall be provided on the makeup water supply line.

1301.2.3 Control valve alarm. Makeup water systems shall be fitted with a warning mechanism that alerts the user to a failure of the inlet control valve to close correctly. The alarm shall activate before the water within the storage tank begins to discharge into the overflow system.

1301.3 Sizing. Nonpotable water distribution systems shall be designed and sized for peak demand in accordance with approved engineering practice methods that comply with the applicable provisions of Chapter 6.

1301.4 Signage required. All nonpotable water outlets, other than water closets and urinals, such as hose connections, open-ended pipes, and faucets shall be identified at the point of use for each outlet with signage that reads as follows: "Nonpotable water is utilized for (insert application name). Caution: nonpotable water. DO NOT DRINK." The words shall be legibly and indelibly printed on a tag or sign constructed of corrosion-resistant waterproof material or shall be indelibly printed on the fixture. The letters of the words shall be not less than 0.5 inches (12.7 mm) in height and in colors in contrast to the background on which they are applied. The pictograph shown in Figure 1301.4 shall appear on the signage required by this section.



1301.5 Potable water supply system connections. Where a potable water supply system is connected to a nonpotable water system, the potable water supply shall be protected against backflow in accordance with the applicable provisions of Section 608.

1301.6 Nonpotable water system connections. Where a nonpotable water system is connected and supplies water to another nonpotable water system, the nonpotable water system that supplies water shall be protected against backflow in accordance with the applicable provisions of Section 608.

1301.7 Approved components and materials. Piping, plumbing components, and materials used in the nonpotable water drainage and distribution systems shall be approved for the intended application and compatible with the water and any disinfection or treatment systems used.

1301.8 Insect and vermin control. Nonpotable water systems shall be protected to prevent the entrance of insects and vermin into storage and piping systems. Screen materials shall be compatible with system material and shall not promote corrosion of system components.

1301.9 Freeze protection. Nonpotable water systems shall be protected from freezing in accordance with the applicable provisions of Chapter 3.

1301.10 Nonpotable water storage tanks. Nonpotable water storage tanks shall be approved for the intended application and comply with Sections 1301.10.1 through 1301.10.12.

1301.10.1 Sizing. The holding capacity of storage tanks shall be sized for the intended use.

1301.10.2 Inlets. Storage tank inlets shall be designed to introduce water into the tank and avoid agitating the contents of the storage tank. The water supply to storage tanks shall be controlled by fill valves or other automatic supply valves designed to stop the flow of incoming water before the tank contents reach the overflow pipes.

1301.10.3 Outlets. Outlets shall be located at least 4 inches (102 mm) above the bottom of the storage tank and shall not skim water from the surface.

1301.10.4 Materials and location. Storage tanks shall be constructed of material compatible with treatment systems used to treat water. Above grade storage vessels shall be constructed using opaque, UV-resistant materials such as tinted plastic, lined metal, concrete, or wood or painted to prevent algae growth. Above grade storage tanks shall be protected from direct sunlight unless their design specifically incorporates the use of the sunlight heat transfer. Wooden storage tanks shall be provided with a flexible liner. Storage tanks and their manholes shall not be located directly under soil or waste piping or sources of contamination.

1301.10.5 Foundation and supports. Storage tanks shall be supported on a firm base capable of withstanding the storage tank's weight when filled to capacity. Storage tanks shall be supported in accordance with the applicable provisions of the IBC.

1301.10.5.1 Ballast. Where the soil can become saturated, an underground storage tank shall be ballasted, or otherwise secured, to prevent the effects of buoyancy. The combined weight of the tank and hold down ballast shall meet or exceed the buoyancy force of the tank. Where the installation requires a foundation, the foundation shall be flat and shall be designed to support the storage tank weight when full, consistent with the bearing capability of adjacent soil.

1301.10.5.2 Structural support. Where installed below grade, storage tank installations shall be designed to withstand earth and surface structural loads without damage.

1301.10.6 Overflow. The storage tank shall be equipped with an overflow pipe having a diameter not less than that shown in Table 606.5.4. The overflow outlet shall discharge at a point not less than 6 inches (152 mm) above the roof or roof drain, floor or floor drain, or over an open water-supplied fixture. The overflow outlet shall terminate through a check valve. Overflow pipes shall not be directed on walkways. The overflow drain shall not be equipped with a shutoff valve. A minimum of one cleanout shall be provided on each overflow pipe in accordance with the applicable provisions of Section 708.

1301.10.7 Access. A minimum of one access opening shall be provided to allow inspection and cleaning of the tank interior. Access openings shall have an approved locking device or other approved method of securing access. Below grade storage tanks, located outside of the building, shall be provided with either a manhole not less than 24 inches (610 mm) square or a manhole with an inside diameter not less than 24 inches (610 mm). The

design and installation of access openings shall prohibit surface water from entering the tank. Each manhole cover shall have an approved locking device or other approved method of securing access.

Exception: Storage tanks under 800 gallons (3028 L) in volume installed below grade shall not be required to be equipped with a manhole, but shall have an access opening not less than 8 inches (203 mm) in diameter to allow inspection and cleaning of the tank interior.

1301.10.8 Venting. Storage tanks shall be vented. Vents shall not be connected to sanitary drainage system. Vents shall be at least equal in size to the internal diameter of the drainage inlet pipe or pipes connected to the tank. Where installed at grade, vents shall be protected from contamination by means of a U-bend installed with the opening directed downward. Vent outlets shall extend a minimum of 12 inches (304.8 mm) above grade, or as necessary to prevent surface water from entering the storage tank. Vent openings shall be protected against the entrance of vermin and insects. Vents serving gray water tanks shall terminate in accordance with the applicable provisions of Sections 903 and 1301.8.

1301.10.9 Drain. Where drains are provided they shall be located at the lowest point of the storage tank. The tank drain pipe shall discharge as required for overflow pipes and shall not be smaller in size than specified in Table 606.5.7. A minimum of one cleanout shall be provided on each drain pipe in accordance with Section 708.

1301.10.10 Labeling and signage. Each nonpotable water storage tank shall be labeled with its rated capacity and the location of the upstream bypass valve. Underground and otherwise concealed storage tanks shall be labeled at all access points. The label shall read: "CAUTION: NONPOTABLE WATER – DO NOT DRINK." Where an opening is provided that could allow the entry of personnel, the opening shall be marked with the words: "DANGER – CONFINED SPACE." Markings shall be indelibly printed on a tag or sign constructed of corrosion-resistant waterproof material mounted on the tank or shall be indelibly printed on the tank. The letters of the words shall be not less than 0.5 inches (12.7 mm) in height and shall be of a color in contrast with the background on which they are applied.

1301.10.11 Storage tank tests. Storage tanks shall be tested in accordance with the following:

- 1. Storage tanks shall be filled with water to the overflow line prior to and during inspection. All seams and joints shall be left exposed and the tank shall remain watertight without leakage for a period of 24 hours.
- 2. After 24 hours, supplemental water shall be introduced for a period of 15 minutes to verify proper drainage of the overflow system and verify that there are no leaks.

- 3. Following a successful test of the overflow, the water level in the tank shall be reduced to a level that is at 2 inches (50.8 mm) below the makeup water offset point. The tank drain shall be observed for proper operation. The makeup water system shall be observed for proper operation, and successful automatic shutoff of the system at the refill threshold shall be verified. Water shall not be drained from the overflow at any time during the refill test.
- 4. Air tests shall be permitted in lieu of water testing as recommended by the tank manufacturer or the tank standard.
- 1301.10.12 Structural strength. Storage tanks shall meet the applicable structural strength requirements of the IBC.
- 1301.11 Trenching requirements for nonpotable water system piping. Underground nonpotable water system piping shall be horizontally separated from the building sewer and potable water piping by 5 feet (1524 mm) of undisturbed or compacted earth. Nonpotable water system piping shall not be located in, under, or above sewage systems cesspools, septic tanks, septic tank drainage fields, or seepage pits. Buried nonpotable system piping shall comply with the requirements of this code for the piping material installed.

#### Exceptions:

- 1. The required separation distance shall not apply where the bottom of the nonpotable water pipe within 5 feet (1524 mm) of the sewer is equal to or greater than 12 inches (305 mm) above the top of the highest point of the sewer and the pipe materials conforms to Table 702.3.
- 2. The required separation distance shall not apply where the bottom of the potable water service pipe within 5 feet (1524 mm) of the nonpotable water pipe is a minimum of 12 inches (305 mm) above the top of the highest point of the nonpotable water pipe and the pipe materials comply with the requirements of Table 605.4.
- 3. Nonpotable water pipe is permitted to be located in the same trench with building sewer piping, provided that such sewer piping is constructed of materials that comply with the requirements of Table 702.2.
- 4. The required separation distance shall not apply where a nonpotable water pipe crosses a sewer pipe, provided that the pipe is sleeved to at least 5 feet (1524 mm) horizontally from the sewer pipe centerline on both sides of such crossing with pipe materials that comply with Table 702.2.
- 5. The required separation distance shall not apply where a potable water service pipe crosses a nonpotable water pipe provided that the potable water service pipe is sleeved for a distance of at least 5 feet (1524 mm)

- horizontally from the centerline of the nonpotable pipe on both sides of such crossing with pipe materials that comply with Table 702.2.
- 1301.12 Outdoor outlet access. Sillcocks, hose bibs, wall hydrants, yard hydrants, and other outdoor outlets that are supplied by nonpotable water shall be located in a locked vault or shall be operable only by means of a removable key.
- 1301.13 Drainage and vent piping and fittings. Nonpotable drainage and vent pipe and fittings shall comply with the applicable material standards and installation requirements in accordance with provisions of Chapter 7.
- 1301.13.1. Labeling and marking. Identification of nonpotable drainage and vent piping shall not be required.
- 1301.14 Pumping and control system. Mechanical equipment, including pumps, valves, and filters, shall be accessible and removable in order to perform repair, maintenance, and cleaning. The minimum flow rate and flow pressure delivered by the pumping system shall be designed for the intended application in accordance with the applicable provisions of Section 604.
- 1301.15 Water-pressure reducing valve or regulator. Where the water pressure supplied by the pumping system exceeds 80 psi (552 kPa) static, a pressure-reducing valve shall be installed to reduce the pressure in the nonpotable water distribution system piping to 80 psi (552 kPa) static or less. Pressure-reducing valves shall be specified and installed in accordance with the applicable provisions of Section 604.8.
- 1301.16 Distribution pipe. Distribution piping utilized in nonpotable water stems shall comply with Sections 1301.16.1 through 1301.16.4.
- 1301.16.1 Materials, joints, and connections. Distribution piping and fittings shall comply with the applicable material standards and installation requirements in accordance with applicable provisions of Chapter 6.
- 1301.16.2 Design. Distribution piping shall be designed and sized in accordance with the applicable provisions of Chapter 6.
- 1301.16.3 Labeling and marking. Distribution piping labeling and marking shall comply with Section 608.8 608.9.
- 1301.16.4 Backflow prevention. Backflow preventers shall be installed in accordance with the applicable provisions of Section 608.
- 1301.17 Tests and inspections. Tests and inspections shall be performed in accordance with Sections 1301.17.1 through 1301.17.5.

- 1301.17.1 Drainage and vent pipe test. Drain, waste, and vent piping used for gray water and rainwater nonpotable water systems shall be tested in accordance with the applicable provisions of Section 312.
- 1301.17.2 Storage tank test. Storage tanks shall be tested in accordance with the Section 1301.10.11.
- 1301.17.3 Water supply system test. Nonpotable distribution piping shall be tested in accordance with Section 312.5.
- 1301.17.4 Inspection and testing of backflow prevention assemblies. The testing of backflow preventers and backwater valves shall be conducted in accordance with Section 312.10.
- 1301.17.5 Inspection of vermin and insect protection. Inlets and vent terminations shall be visually inspected to verify that each termination is installed in accordance with Section 1301.10.8.
- 1301.18 Operation and maintenance manuals. Operations and maintenance materials for nonpotable water systems shall be provided as prescribed by the system component manufacturers and supplied to the owner to be kept in a readily accessible location.
- 21. 29. Change the title of Section 1302 of the IPC to "Gray Water Nonpotable Water Systems."
- 22. 30. Change Sections 1302.1 through 1302.6, including subsections, of the IPC to read as follows and delete Sections 1302.7 through 1302.13:
  - 1302.1 Gray water nonpotable water systems. This code is applicable to the plumbing fixtures, piping or piping systems, storage tanks, drains, appurtenances, and appliances that are part of the distribution system for gray water within buildings and to storage tanks and associated piping that are part of the distribution system for gray water outside of buildings. This code does not regulate equipment used for, or the methods of, processing, filtering, or treating gray water, that may be regulated by the Virginia Department of Health or the Virginia Department of Environmental Quality.
  - 1302.1.1 Separate systems. Gray water nonpotable water systems, unless approved otherwise under the permit from the Virginia Department of Health, shall be separate from the potable water system of a building with no cross connections between the two systems except as permitted by the Virginia Department of Health.
  - 1302.2 Water quality. Each application of gray water reuse shall meet the minimum water quality requirements set forth in Sections 1302.2.1 through 1302.2.4 unless otherwise superseded by other state agencies.
  - 1302.2.1 Disinfection. Where the intended use or reuse application for nonpotable water requires disinfection or

- other treatment or both, it shall be disinfected as needed to ensure that the required water quality is delivered at the point of use or reuse.
- 1302.2.2 Residual disinfectants. Where chlorine is used for disinfection, the nonpotable water shall contain not more than 4 parts per million (4 mg/L) of free chlorine, combined chlorine, or total chlorine. Where ozone is used for disinfection, the nonpotable water shall not exceed 0.1 parts per million (by volume) of ozone at the point of use.
- 1302.2.3 Filtration. Water collected for reuse shall be filtered as required for the intended end use. Filters shall be accessible for inspection and maintenance. Filters shall utilize a pressure gauge or other approved method to indicate when a filter requires servicing or replacement. Shutoff valves installed immediately upstream and downstream of the filter shall be included to allow for isolation during maintenance.
- 1302.2.4 Filtration required. Gray water utilized for water closet and urinal flushing applications shall be filtered by a 100 micron or finer filter.
- 1302.3 Storage tanks. Storage tanks utilized in gray water nonpotable water systems shall comply with Section 1301.10.
- 1302.4 Retention time limits. Untreated gray water shall be retained in storage tanks for a maximum of 24 hours.
- 1302.5 Tank Location. Storage tanks shall be located with a minimum horizontal distance between various elements as indicated in Table 1302.5.1.

Table 1302.5.1 Location of Nonpotable Gray Water Reuse Storage Tanks					
Element	Minimum Horizontal Distance from Storage Tank (feet)				
Lot line adjoining private lots	5				
Sewage systems	5				
Septic tanks	5				
Water wells	50				
Streams and lakes	50				
Water service	5				
Public water main	10				

1302.6 Valves. Valves shall be supplied on gray water nonpotable water drainage systems in accordance with Sections 1302.6.1 and 1302.6.2.

1302.6.1 Bypass valve. One three-way diverter valve certified to NSF 50 or other approved device shall be installed on collection piping upstream of each storage tank, or drainfield, as applicable, to divert untreated gray water to the sanitary sewer to allow servicing and inspection of the system. Bypass valves shall be installed downstream of fixture traps and vent connections. Bypass valves shall be labeled to indicate the direction of flow, connection, and storage tank or drainfield connection. Bypass valves shall be provided with access for operation and maintenance. Two shutoff valves shall not be installed to serve as a bypass valve.

1302.6.2 Backwater valve. Backwater valves shall be installed on each overflow and tank drain pipe to prevent unwanted water from draining back into the storage tank. If the overflow and drain piping arrangement is installed to physically not allow water to drain back into the tank, such as in the form of an air gap, backwater valves shall not be required. Backwater valves shall be constructed and installed in accordance with Section 715.

# 23. 31. Delete Sections 1302.7 through 1302.13.4, including subsections, of the IPC.

<u>32.</u> Change the title of Section 1303 of the IPC to "Rainwater Nonpotable Water Systems."

24. 33. Change Sections 1303.1 through 1303.10, including subsections, of the IPC to read as follows and delete Sections 1303.11 through 1303.16:

1303.1 General. The provisions of this section shall govern the design, construction, installation, alteration, and repair of rainwater nonpotable water systems for the collection, storage, treatment, and distribution of rainwater for nonpotable applications. The provisions of CSA B805/ICC 805 shall be permitted as an alternative to the provisions contained in this section for the design, construction, installation, alteration, and repair of rainwater nonpotable water systems for the collection, storage, treatment, and distribution of rainwater for nonpotable applications. Roof runoff or stormwater runoff collection surfaces shall be limited to roofing materials, public pedestrian accessible roofs, and subsurface collection identified in CSA B805/ICC 805 Table 7.1. Stormwater runoff shall not be collected from any other surfaces.

1303.2 Water quality. Each application of rainwater reuse shall meet the minimum water quality requirements set forth in Sections 1303.2.1 through 1303.2.4 unless otherwise superseded by other state agencies.

1303.2.1 Disinfection. Where the intended use or reuse application for nonpotable water requires disinfection or other treatment or both, it shall be disinfected as needed to ensure that the required water quality is delivered at the point of use or reuse.

1303.2.2 Residual disinfectants. Where chlorine is used for disinfection, the nonpotable water shall contain not more than 4 parts per million (4 mg/L) of free chlorine, combined chlorine, or total chlorine. Where ozone is used for disinfection, the nonpotable water shall not exceed 0.1 parts per million (by volume) of ozone at the point of use.

1303.2.3 Filtration. Water collected for reuse shall be filtered as required for the intended end use. Filters shall be accessible for inspection and maintenance. Filters shall utilize a pressure gauge or other approved method to indicate when a filter requires servicing or replacement. Shutoff valves installed immediately upstream and downstream of the filter shall be included to allow for isolation during maintenance.

1303.2.4 Filtration required. Rainwater utilized for water closet and urinal flushing applications shall be filtered by a 100 micron or finer filter.

1303.3 Collection surface. Rainwater shall be collected only from aboveground impervious roofing surfaces constructed from approved materials. Overflow or discharge piping from appliances or equipment, or both, including but not limited to evaporative coolers, water heaters, and solar water heaters shall not discharge onto rainwater collection surfaces.

1303.4 Collection surface diversion. At a minimum, the first 0.04 inches (1.016 mm) of each rain event of 25 gallons (94.6 L) per 1000 1.000 square feet (92.9 m²) shall be diverted from the storage tank by automatic means and not require the operation of manually operated valves or devices. Diverted water shall not drain onto other collection surfaces that are discharging to the rainwater system or to the sanitary sewer. Such water shall be diverted from the storage tank and discharged in an approved location.

1303.5 Pre-tank filtration. Downspouts, conductors, and leaders shall be connected to a pre-tank filtration device. The filtration device shall not permit materials larger than 0.015 inches (0.4 mm).

1303.6 Roof gutters and downspouts. Gutters and downspouts shall be constructed of materials that are compatible with the collection surface and the rainwater quality for the desired end use. Joints shall be made watertight.

1303.6.1 Slope. Roof gutters, leaders, and rainwater collection piping shall slope continuously toward collection inlets. Gutters and downspouts shall have a slope of not less than 1 unit in 96 units along their entire length and shall not permit the collection or pooling of water at any point.

Exception: Siphonic roof drainage systems installed in accordance with Chapter 11 shall not be required to have slope.

1303.6.2 Size. Gutters and downspouts shall be installed and sized in accordance with Section 1106.6 and local rainfall rates.

1303.6.3 Cleanouts. Cleanouts or other approved openings shall be provided to permit access to all filters, flushes, pipes, and downspouts.

1303.7 Storage tanks. Storage tanks utilized in rainwater nonpotable water systems shall comply with Section 1301.10.

1303.8 Location. Storage tanks shall be located with a minimum horizontal distance between various elements as indicated in Table 1303.8.1.

Table 1303.8.1 Location of Rainwater Storage Tanks				
Element	Minimum Horizontal Distance from Storage Tank (feet)			
Lot line adjoining private lots	5			
Sewage systems	5			
Septic tanks	5			

1303.9 Valves. Valves shall be installed in collection and conveyance drainage piping of rainwater nonpotable water systems in accordance with Sections 1303.9.1 and 1303.9.2.

1303.9.1 Influent diversion. A means shall be provided to divert storage tank influent to allow maintenance and repair of the storage tank system.

1303.9.2 Backwater valve. Backwater valves shall be installed on each overflow and tank drain pipe to prevent unwanted water from draining back into the storage tank. If the overflow and drain piping arrangement is installed to physically not allow water to drain back into the tank, such as in the form of an air gap, backwater valves shall not be required. Backwater valves shall be constructed and installed in accordance with Section 715.

1303.10 Tests and inspections. Tests and inspections shall be performed in accordance with Sections 1303.10.1 through 1303.10.2.

1303.10.1 Roof gutter inspection and test. Roof gutters shall be inspected to verify that the installation and slope is in accordance with Section 1303.6.1. Gutters shall be tested by pouring a minimum of one gallon of water into the end of the gutter opposite the collection point. The

gutter being tested shall not leak and shall not retain standing water.

1303.10.2 Collection surface diversion test. A collection surface diversion test shall be performed by introducing water into the gutters or onto the collection surface area. Diversion of the first quantity of water in accordance with the requirements of Section 1303.4 shall be verified.

25. 34. Delete Sections 1303.11 through 1303.16.4, including subsections, of the IPC.

<u>35.</u> Change Sections 1304.1 and 1304.2 of the IPC to read as follows and delete Sections 1304.3 and 1304.4:

1304.1 General. Reclaimed water, water reclamation systems, reclaimed water distribution systems, and allowable nonpotable reuses of reclaimed water are as defined or specified in and governed by the Virginia Water Reclamation and Reuse Regulation (9VAC25-740). Permits from the Virginia State Water Control Board are required for such systems and reuses. The provisions of Section 1304 shall govern the design, construction, installation, alterations, and repair of plumbing fixtures, piping or piping systems, storage tanks, drains, appurtenances, and appliances that are part of the distribution system for reclaimed water within buildings and to storage tanks for reclaimed water as defined in the Virginia Water Reclamation and Reuse Regulation (9VAC25-740) and associated piping outside of buildings that deliver reclaimed water into buildings. Where conflicts occur between this code and the Virginia Water Reclamation and Reuse Regulation (9VAC25-740), the provisions of the Virginia Water Reclamation and Reuse Regulation (9VAC25-740) shall apply unless determined otherwise by the Virginia Department of Environmental Quality and DHCD through memorandum of agreement.

1304.2 Design of reclaimed water systems. The design of reclaimed water systems shall conform to applicable requirements of Section 1301.

Exception: The design of reclaimed water systems shall conform to applicable requirements of the Virginia Water Reclamation and Reuse Regulation (9VAC25-740) for the following:

- 1. Identification, labeling, and posting of signage for reclaimed water systems in lieu of signage requirements described in Section 1301.4.
- 2. Sizing of system storage as defined in the Virginia Water Reclamation and Reuse Regulation (9VAC25-740), in addition to storage sizing requirements described in Section 1301.10.1.
- 3. Signage and labeling for reclaimed water storage in addition to labeling and signage requirements described in Section 1301.10.10.

- 4. Minimum separation distances and configurations for in-ground reclaimed water distribution piping in lieu of trenching requirements for nonpotable water systems described in Section 1301.11.
- 36. Delete Sections 1304.3 and 1304.4.2, including subsections, of the IPC.
- 37. Add the following referenced standards to Chapter 15 as follows: (Standards not shown remain the same.)

Standard Reference Number	<u>Title</u>	Referenced in Code Section Number
ASTM F1871- 2011	Standard Specification for Folded/Formed Poly (Vinyl Chloride) Pipe Type A for Existing Sewer and Conduit Rehabilitation	<u>717.6</u>
ASTM F1504- 2014	Standard Specification for Folded Poly (Vinyl Chloride) (PVC) for Existing Sewer and Conduit Rehabilitation	717.6
<u>CSA B805-</u> <u>18/ICC 805-</u> <u>2018</u>	Rainwater Harvesting Systems	1303.1

C. Modify the Group A 5 following Assembly "Description" category of Table 2902.1 of the IBC to read:

Stadiums, amusement parks, pools, bleachers, and grandstands for outdoor sporting events and activities  $^{\rm f\,g}$ 

- D. Add footnote "f" "g" to Table 2902.1 of the IBC to read:
- f. g. The occupant load for pools shall be in accordance with the "Skating rinks, swimming pools" category of Table 1004.1.2 1004.5.

# 13VAC5-63-330. Chapter 30 Elevators and conveying systems.

A. Change Section 3002.4 of the IBC to read:

3002.4 Elevator car to accommodate ambulance stretcher. Where elevators are provided in buildings four or more stories above, or four or more stories below, grade plane, at least one elevator shall be provided for fire department emergency access to all floors. The elevator car shall be of such a size and arrangement to accommodate an ambulance stretcher 24 inches by 84 inches (610 mm by 2134 mm) with not less than five-inch (127 mm) radius

corners, in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall not be less than three inches (76 mm) high and shall be placed inside on both sides of the hoistway door frame on the designated and alternate landing floors required to be established by ASME A17.1.

Exception: Elevators in multistory dwelling units or guest rooms.

- B. Change Section 3003.3 of the IBC to read:
- 3003.3 Fire service elevator keys. All elevators shall be equipped to operate with either a standardized or non-standardized fire service elevator key in accordance with the IFC.
- C. Change Section 3005.4 of the IBC to read:

3005.4 Machine and control rooms, control spaces, and machinery spaces. Elevator machine rooms, rooms and spaces housing elevator controllers, and machinery spaces outside of but attached to a hoistway that have openings into the hoistway shall be enclosed with fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both. The fire-resistance rating shall not be less than the required rating of the hoistway enclosure. Openings in the fire barriers shall be protected with assemblies having a fire protection rating not less than that required for the hoistway enclosure doors.

## **Exception** Exceptions:

- 1. Where elevator machine rooms, rooms and spaces housing elevator controllers, and machinery spaces do not abut and do not have openings to the hoistway enclosure they serve, the fire barrier constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both, shall be permitted to be reduced to a one-hour fire-resistance rating.
- 2. In buildings four stories or less above grade plane when elevator machine rooms, rooms and spaces housing elevator controllers, and machinery spaces do not abut and have no openings to the hoistway enclosure they serve, the elevator machine rooms, rooms and spaces housing elevator controllers, and machinery spaces are not required to be fire-resistance rated.
- D. Add Section 3005.7 to the IBC to read:
- 3005.7 Machine-room-less designs. Where machine-room-less designs are utilized they shall comply with the provisions of ASME A17.1 and incorporate the following:
  - 1. Where the elevator car-top will be used as a work platform, it shall be equipped with permanently installed guards on all open sides. Guards shall be permitted to be

of collapsible design, but otherwise must conform to all applicable requirements of this code for guards.

- 2. Where the equipment manufacturer's procedures for machinery removal and replacement depend on overhead structural support or lifting points, such supports or lifting points shall be permanently installed at the time of initial equipment installation.
- 3. Where the structure that the elevator will be located in is required to be fully sprinklered by this code, the hoistway that the elevator machine is located in shall be equipped with a fire suppression system as a machine room in accordance with NFPA 13. Smoke detectors for the automatic initiation of Phase I Emergency Recall Operation, and heat detectors or other approved devices that automatically disconnect the main line power supply to the elevators, shall be installed within the hoistway.
- E. Delete Section 3006 of the IBC in its entirety.
- F. Change the exception to 3007.6 to read:

Exception: Where a fire service access elevator has two entrances onto a floor, the second entrance shall be permitted to be protected in accordance with IBC Section 3006.3.

G. Change Section 3008.1 of the IBC to read:

3008.1 General. Where elevators in buildings greater than 420 feet (128 016 (128,016 mm) in building height are to be used for occupant self-evacuation during fires, all passenger elevators for general public use shall comply with this section.

### 13VAC5-63-336. Chapter 31 Special construction.

A. Change the title of IBC Section 3109 to read:

Swimming Pools, Swimming Pool Enclosures, and Aquatic Recreational Facilities.

- B. Change Section 3109.1 of the IBC to read as follows, add Section 3109.1.1 to the IBC to read as follows, and delete the remainder of Section 3109 of the IBC:
  - 3109.1 General. Swimming pools, swimming pool enclosures, and aquatic recreational facilities, as that term is defined in the ISPSC, shall comply with applicable provisions of the ISPSC.
  - 3109.1.1 Changes to the ISPSC. The following changes shall be made to the ISPSC:
  - 1. Add Section 410.2 and related subsections to the ISPSC to read:
    - 410.2 Showers. Showers shall be in accordance with Sections 410.2.1 through 410.2.5.
    - 410.2.1 Deck hand shower or shower spray unit. Not less than one and not greater than half of the total number of showers required by Section 410.1 shall be a hand

shower or spray shower unit located on the deck of or at the entrance of each pool.

- 410.2.2 Anti-scald device. Where heated water is provided to the showers, the shower water supply shall be controlled by an anti-scald device.
- 410.2.3 Water heater and mixing valve. Bather access to water heaters and thermostatically controlled mixing valves for showers shall be prohibited.
- 410.2.4 Flow rate. Each showerhead shall have a water flow of not less than 2 gallons per minute (7.6 lpm).
- 410.2.5 Temperature. At each showerhead, the heated shower water temperature shall not exceed 120°F (49°C) and shall not be less than 90°F (32°C).
- Change the title of Section 609 of the ISPSC to read: Dressing and Sanitary Facilities.
- 3. Change Section 609.3.1 of the ISPSC to read:
  - 609.3.1 Deck hand shower or shower spray unit. Not less than one and not greater than half of the total number of showers required by Section 609.2 shall be a hand shower or shower spray unit located on the deck of or at the entrance of each pool.
- C. Delete Section 3113 of the IBC in its entirety.

# 13VAC5-63-340. Chapter 33 Safeguards during construction.

A. Delete Section 3302.1 of the IBC.

<u>B.</u> Delete IBC Sections <u>3303 and</u> 3305 <del>and 3305.1</del> <u>in their</u> entirety.

C. Change Section 3310.2 of the IBC to read:

3310.2 Maintenance of means of egress. Means of egress and required accessible means of egress shall be maintained at all times during construction.

## 13VAC5-63-360. Chapter 35 Referenced standards.

Change the referenced standards in Chapter 35 of the IBC as follows (standards not shown remain the same):

Standard reference number	Title	Referenced in code section number
ASTM E329-02	Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction	1703.1, 1703.1.3
API 650-09	Welded Steel Tanks for Oil Storage	<del>428.2</del> <u>430.2</u>

API 653-09	Tank Inspection, Repair, Alteration and Reconstruction	428.4, 428.5 430.4, 430.5
ASME A18.1-2011	Safety Standard for Platform Lifts and Stairway Chairlifts	<del>1109.8</del>
NFPA 91-15	Standard for Exhaust Systems for Air Conveying of Vapors, Mists and Particulate Solids	430.3.6 428.3.7
ISPSC 15 ISPSC-18	International Swimming Pool and Spa Code	202, 3109.1, 3109.1.1
TFI RMIP-09	Aboveground Storage Tanks Containing Liquid Fertilizer, Recommended Mechanical Integrity Practices	428.2 430.2, 428.4 430.4, 428.5 430.5
UL 2075-13	Standard for Gas and Vapor Detectors and Sensors	915.4 <u>, 915.5.1,</u> <u>915.5.3</u>

Part II
Existing Buildings

# 13VAC5-63-400. Chapter 1 Administration; Section 101 General.

- A. Section 101.1 Short title. The Virginia Uniform Statewide Building Code, Part II, Existing Buildings, may be cited as the "Virginia Existing Building Code" or as the "VEBC."
- B. Section 101.2 Incorporation by reference. Chapters 2 16 of the 2015 2018 International Existing Building Code, published by the International Code Council, Inc., are adopted and incorporated by reference to be an enforceable part of the VEBC. The term "IEBC" means the 2015 2018 International Existing Building Code, published by the International Code Council, Inc. Any codes and standards referenced in the IEBC are also considered to be part of the incorporation by reference, except that such codes and standards are used only to the prescribed extent of each such reference.
- C. Section 101.3 Numbering system. A dual numbering system is used in the VEBC to correlate the numbering system of the Virginia Administrative Code with the numbering system of the IEBC. IEBC numbering system designations are provided in the catchlines of the Virginia Administrative Code sections and cross references between sections or chapters of the VEBC use only the IEBC numbering system designations. The term "chapter" is used in the context of the numbering system of the IEBC and may mean a chapter in the VEBC, a chapter in the IEBC or a

chapter in a referenced code or standard, depending on the context of the use of the term. The term "chapter" is not used to designate a chapter of the Virginia Administrative Code, unless clearly indicated.

- D. Section 101.4 Arrangement of code provisions. The VEBC is comprised of the combination of (i) the provisions of Chapter 1, Administration, which are established herein, (ii) Chapters 2 - 16 of the IEBC, which are incorporated by reference in Section 101.2, and (iii) the changes to the text of the incorporated chapters of the IEBC that are specifically identified, including any new chapters added. The terminology "changes to the text of the incorporated chapters of the IEBC that are specifically identified, including any new chapters added" shall also be referred to as the "state amendments to the IEBC." Such state amendments to the IEBC are set out using corresponding chapter and section numbers of the IEBC numbering system. In addition, since Chapter 1 of the IEBC is not incorporated as part of the VEBC, any reference to a provision of Chapter 1 of the IEBC in the provisions of Chapters 2 - 16 of the IEBC is generally invalid. However, where the purpose of such a reference would clearly correspond to a provision of Chapter 1 established herein, then the reference may be construed to be a valid reference to such corresponding Chapter 1 provision.
- E. Section 101.5 Use of terminology and notes. The provisions of this code shall be used as follows:
  - 1. The term "this code," or "the code," where used in the provisions of Chapter 1, in Chapters 2 16 of the IEBC, or in the state amendments to the IEBC, means the VEBC, unless the context clearly indicates otherwise.
  - 2. The term "this code," or "the code," where used in a code or standard referenced in the VEBC, means that code or standard, unless the context clearly indicates otherwise.
  - 3. The term "USBC" where used in this code, means the VCC, unless the context clearly indicates otherwise.
  - 4. The use of notes in Chapter 1 is to provide information only and shall not be construed as changing the meaning of any code provision.
  - 5. Notes in the IEBC, in the codes and standards referenced in the IEBC and in the state amendments to the IEBC, may modify the content of a related provision and shall be considered to be a valid part of the provision, unless the context clearly indicates otherwise.
  - 6. References to International Codes and standards, where used in this code, include state amendments made to those International Codes and standards in the VCC.

Note: See Section 101.2 of the VCC for a list of major codes and standards referenced in the VCC.

- F. Section 101.6 Order of precedence. The provisions of this code shall be used as follows:
  - 1. The provisions of Chapter 1 of this code supersede any provisions of Chapters 2 16 of the IEBC that address the same subject matter and impose differing requirements.
  - 2. The provisions of Chapter 1 of this code supersede any provisions of the codes and standards referenced in the IEBC that address the same subject matter and impose differing requirements.
  - 3. The state amendments to the IEBC supersede any provisions of Chapters 2 16 of the IEBC that address the same subject matter and impose differing requirements.
  - 4. The state amendments to the IEBC supersede any provisions of the codes and standards referenced in the IEBC that address the same subject matter and impose differing requirements.
  - 5. The provisions of Chapters 2 16 of the IEBC supersede any provisions of the codes and standards referenced in the IEBC that address the same subject matter and impose differing requirements.
- G. Section 101.7 Administrative provisions. The provisions of Chapter 1 establish administrative requirements, which include but are not limited to provisions relating to the scope and enforcement of the code. Any provisions of Chapters 2 -16 of the IEBC or any provisions of the codes and standards referenced in the IEBC that address the same subject matter to a lesser or greater extent are deleted and replaced by the provisions of Chapter 1. Further, any administrative requirements contained in the state amendments to the IEBC shall be given the same precedence as the provisions of Chapter 1. Notwithstanding the above, where administrative requirements of Chapters 2 - 16 of the IEBC or of the codes and standards referenced in the IEBC are specifically identified as valid administrative requirements in Chapter 1 of this code or in the state amendments to the IEBC, then such requirements are not deleted and replaced.

Note: The purpose of this provision is to eliminate overlap, conflicts and duplication by providing a single standard for administrative, procedural and enforcement requirements of this code.

H. Section 101.8 Definitions. The definitions of terms used in this code are contained in Chapter 2 along with specific provisions addressing the use of definitions. Terms may be defined in other chapters or provisions of the code and such definitions are also valid.

### 13VAC5-63-410. Section 102 Purpose and scope.

A. Section 102.1 Purpose. In accordance with § 36-99.01 of the Code of Virginia, the General Assembly of Virginia has declared that (i) there is an urgent need to improve the housing conditions of low and moderate income individuals

and families, many of whom live in substandard housing, particularly in the older cities of the Commonwealth; (ii) there are large numbers of older residential buildings in the Commonwealth, both occupied and vacant, which are in urgent need of rehabilitation and must be rehabilitated if the state's citizens are to be housed in decent, sound, and sanitary conditions; and (iii) the application of those building code requirements currently in force to housing rehabilitation has sometimes led to the imposition of costly and time-consuming requirements that result in a significant reduction in the amount of rehabilitation activity taking place.

The General Assembly further declares that (i) there is an urgent need to improve the existing condition of many of the Commonwealth's stock of commercial properties, particularly in older cities; (ii) there are large numbers of older commercial buildings in the Commonwealth, both occupied and vacant, that are in urgent need of rehabilitation and that must be rehabilitated if the citizens of the Commonwealth are to be provided with decent, sound and sanitary work spaces; and (iii) the application of the existing building code to such rehabilitation has sometimes led to the imposition of costly and time-consuming requirements that result in a significant reduction in the amount of rehabilitation activity taking place.

- B. Section 102.2 Scope. The provisions of this code shall govern construction and rehabilitation activities in existing buildings and structures.
- C. 102.2.1 Change of occupancy to Group I-2 or I-3. A change of occupancy to Group I-2 or I-3 shall comply with the provisions of the VCC. Written application shall be made to the local building department for a new certificate of occupancy, and the new certificate of occupancy shall be obtained prior to the change of occupancy. When impractical to achieve compliance with the VCC for the new occupancy classification, the building official shall consider modifications upon application and as provided for in Section 106.3 of the VCC.
- D. 102.2.2 Reconstruction, alteration, or repair in Group R-5 occupancies. Compliance with this section shall be an acceptable alternative to compliance with this code at the discretion of the owner or owner's agent. The VCC may be used for the reconstruction, alteration, or repair of Group R-5 buildings or structures subject to the following criteria:
  - 1. Any reconstruction, alteration or repair shall not adversely affect the performance of the building or structure, or cause the building or structure to become unsafe or lower existing levels of health and safety.
  - 2. Parts of the building or structure not being reconstructed, altered, or repaired shall not be required to comply with the requirements of the VCC applicable to newly constructed buildings or structures.
  - 3. The installation of material or equipment, or both, that is neither required nor prohibited shall only be required to

comply with the provisions of the VCC relating to the safe installation of such material or equipment.

4. Material or equipment, or both, may be replaced in the same location with material or equipment of a similar kind of capacity.

### **Exceptions:**

- 1. This section shall not be construed to permit noncompliance with any applicable flood load or flood-resistant construction requirements of the VCC.
- 2. Reconstructed decks, balconies, porches, and similar structures located 30 inches (762 mm) or more above grade shall meet the current code provisions for structural loading capacity, connections, and structural attachment. This requirement excludes the configuration and height of handrails and guardrails.
- 5. In accordance with § 36-99.2 of the Code of Virginia, any replacement glass installed in buildings constructed prior to the first edition of the USBC shall meet the quality and standards for glass installed in new buildings as are in effect at the time of installation. In addition, as a requirement of this code, the installation of replacement of glass in buildings constructed under any edition of the USBC shall be as required for new installations installation or replacement of glass shall comply with Section R308 or Chapter 24 of the VCC.

#### 13VAC5-63-420. Section 103 Application of code.

- A. Section 103.1 General. All administrative provisions of the VCC, including requirements for permits, inspections and approvals by the local building department, provisions for appeals from decisions of the local building department and the issuance of modifications, are applicable to the use of this code, except where this code sets out differing requirements. Where there is a conflict between a general requirement and a specific requirement in the IEBC, the specific requirement shall govern.
- B. Section 103.1.1 Use of performance code. Compliance with the provisions of a nationally recognized performance code when approved as a modification shall be considered to constitute compliance with this code. All documents submitted as part of such consideration shall be retained in the permanent records of the local building department.
- C. Section 103.1.2 Preliminary meeting. When requested by a prospective permit applicant or when determined necessary by the code official, the code official shall meet with the prospective permit applicant prior to the application for a permit to discuss plans for the proposed work or change of occupancy in order to establish the specific applicability of the provisions of this code.
- D. Section 103.2 Change of occupancy. Prior to a change of occupancy of the building or structure, the owner or the

owner's agent shall make written application to the local building department for a new certificate of occupancy and shall obtain the new certificate of occupancy.

When impractical to achieve compliance with this code for the new occupancy, the building official shall consider modifications upon application and as provided for in Section 106.3 of the VCC.

- E. Section 103.3 Retrofit requirements. The local building department shall enforce the provisions of Section 1101 that require certain existing buildings to be retrofitted with fire protection systems and other safety equipment. Retroactive fire protection system requirements contained in the IFC shall not be applicable unless required for compliance with the provisions of Section 1101.
- F. Section 103.4 Nonrequired equipment. The following criteria for nonrequired equipment is are in accordance with § 36-103 of the Code of Virginia. Building owners may elect to install partial or full fire alarms or other safety equipment that was not required by the edition of the VCC in effect at the time a building was constructed without meeting current requirements of the code, provided the installation does not create a hazardous condition. Permits for installation shall be obtained in accordance with the VCC. In addition, as a requirement of this code, when such nonrequired equipment is to be installed, the building official shall notify the appropriate fire official or fire chief.
- G. Section 103.4.1 Reduction in function or discontinuance of nonrequired fire protection systems. When a nonrequired fire protection system is to be reduced in function or discontinued, it shall be done in such a manner so as not to create a false sense of protection. Generally, in such cases, any features visible from interior areas shall be removed, such as sprinkler heads, smoke detectors, or alarm panels or devices, but any wiring or piping hidden within the construction of the building may remain. Approval of the proposed method of reduction or discontinuance shall be obtained from the building official.
- H. Section 103.5 Equipment changes. Upon the replacement or new installation of any fuel burning appliances or equipment in existing buildings, an inspection or inspections shall be conducted in accordance with Section 113.3.1 of the VCC.
- I. <u>H.</u> Section <u>103.6</u> <u>103.5</u> Requirements relating to maintenance. Any requirements of the IEBC requiring the maintenance of existing buildings or structures are invalid.

Note: Requirements for the maintenance of existing buildings and structures and for unsafe conditions are contained in the VMC.

J. I. Section 103.7 103.6 Use of Appendix A. Appendix A of the IEBC provides guidelines for the seismic retrofit of existing buildings. The use of this appendix is not mandatory

but shall be permitted to be utilized at the option of an owner, the owner's agent or the RDP involved in a rehabilitation project. However, in no case shall the use of Appendix A be construed to authorize the lowering of existing levels of health or safety in buildings or structures being rehabilitated.

- K. J. Section 103.8 103.7 Use of Appendix B. Appendix B of the IEBC provides supplementary accessibility requirements for existing buildings and facilities. All applicable requirements of Appendix B shall be met in buildings and structures being rehabilitated.
- L. K. Section 103.9 103.8 Use of Resource A. Resource A of the IEBC provides guidelines for the evaluation of fire resistance ratings of archaic materials and may be used in conjunction with rehabilitation projects.

M. 103.10 L. 103.9 Construction documents. Construction documents shall be submitted with the application for a permit. The work proposed to be performed on an existing building or structure shall be classified on the construction documents as repairs, alterations, change of occupancy, addition, historic building, or moved building. All work areas shall be identified on the construction documents. Alterations shall further be identified classified as Level 1, Level 2, or Level 3.2.

Exception: <u>construction</u> <u>Construction</u> documents or classification of the work does not need to be submitted when the building official determines the proposed work does not require such documents, classification, or identification.

## 13VAC5-63-430. Chapter 2 Definitions.

A. Change Section 201.3 of the IEBC to read:

201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the other International Codes, such terms shall have the meanings ascribed to them in those codes, except that terms that are not defined in this code and that are defined in the VCC shall take precedence over other definitions.

B. Change the following definitions in Section 202 of the IEBC to read:

Alteration. Any construction or renovation to an existing structure other than a repair or addition.

Building. A combination of materials, whether portable or fixed, having a roof to form a structure for the use or occupancy by persons or property. The word "building" shall be construed as though followed by the words "or part or parts thereof" unless the context clearly requires a different meaning. "Building" shall not include roadway tunnels and bridges owned by the Virginia Department of Transportation, which shall be governed by construction and design standards approved by the Commonwealth Transportation Board.

For application of this code, each portion of a building that is completely separated from other portions by fire walls complying with Section 706 of the VCC shall be considered as a separate building (see Section 503.1 of the VCC).

Change of occupancy. Either of the following shall be considered a change of occupancy where the current VCC requires a greater degree of accessibility, structural strength, fire protection, means of egress, ventilation or sanitation than is existing in the current building or structure:

- 1. Any change in the occupancy classification of a building or structure.
- 2. Any change in the purpose of, or a change in the level of activity within, a building or structure.

Note: The use and occupancy classification of a building or structure, shall be determined in accordance with Chapter 3 of the VCC.

Existing building. A building for which a legal certificate of occupancy has been issued under any edition of the USBC or approved by the building official when no legal certificate of occupancy exists, and that has been occupied for its intended use; or, a building built prior to the initial edition of the USBC.

Existing structure. A structure (i) for which a legal building permit has been issued under any edition of the USBC, (ii) that has been previously approved, or (iii) that was built prior to the initial edition of the USBC. For application of provisions in flood hazard areas, an existing structure is any building or structure for which the start of construction commenced before the effective date of the community's first flood plain management code, ordinance, or standard.

Substantial improvement. For the purpose of determining compliance with the flood provisions of this code, any improvement, including repair, reconstruction, rehabilitation, alteration, or addition, or other improvement of a building or structure or a portion thereof, the cost of which equals or exceeds 50% of the market value of the building or structure before the improvement or repair is started. If the building or structure has sustained substantial damage, any improvements are considered substantial improvement regardless of the actual improvement performed. The term does not, however, include either:

- 1. Any project for improvement of a building or structure required to correct existing health, sanitary, or safety code violations identified by the building official and that is the minimum necessary to assure safe living conditions; or
- 2. Any alteration of a historic structure, provided that the alteration will not preclude the building or structure's continued designation as a historic building or structure.

Work area. That intended room, space, or portion of a building or structure where a wall or walls are added, relocated, or removed. Work area excludes (i) the addition or elimination of any door or window; (ii) the reconfiguration or extension of any system; (iii) the installation of any additional equipment; (iv) the removal of finished flooring or ceiling materials; (v) adjacent rooms or other rooms, spaces, or portions of the building or structure where incidental work entailed by the intended work must be performed; and (vi) portions of the building or structure where work not initially intended is specifically required by this code.

C. Add the following definitions to Section 202 of the IEBC to read:

Building. A combination of materials, whether portable or fixed, having a roof to form a structure for the use or occupancy by persons, or property. The word "building" shall be construed as though followed by the words "or part of parts thereof" unless the context clearly requires a different meaning. "Building" shall not include roadway tunnels and bridges owned by the Virginia Department of Transportation, which shall be governed by construction and design standards approved by the Virginia Commonwealth Transportation Board.

For application of this code, each portion of a building that is completely separated from other portions by fire walls complying with Section 706 of the VCC shall be considered as a separate building (see Section 503.1 of the VCC).

Existing structure. A structure (i) for which a legal building permit has been issued under any edition of the USBC, (ii) which has been previously approved, or (iii) which was built prior to the initial edition of the USBC. For application of provisions in flood hazard areas, an existing structure is any building or structure for which the start of construction commenced before the effective date of the community's first flood plain management code, ordinance, or standard.

Moved building or structure. An existing building or structure that is moved to a new location.

Structure. An assembly of materials forming a construction for occupancy or use including stadiums, gospel and circus tents, reviewing stands, platforms, stagings, observation towers, radio towers, water tanks, storage tanks (underground and aboveground), trestles, piers, wharves, swimming pools, amusement devices, storage bins, and other structures of this general nature but excluding water wells. The word "structure" shall be construed as though followed by the words "or part or parts thereof" unless the context clearly requires a different meaning. "Structure" shall not include roadway tunnels and bridges owned by the Virginia Department of Transportation, which shall be

governed by construction and design standards approved by the Virginia Commonwealth Transportation Board.

D. Delete the following definitions from Section 202 of the IEBC:

Approved

Dangerous

Deferred submittal

Facility

Flood hazard area

Registered design professional in responsible charge

Relocatable building

Unsafe

Work area

# 13VAC5-63-431. Chapter 3 General provisions and special detailed requirements.

- A. Change IEBC Section 301 to General.
- B. Change Section 301.1 and delete Sections 301.1.1 through 301.1.4.2, including tables, of the IEBC- to read:
  - 301.1 Applicability. The applicable provisions of this chapter shall be used in conjunction with the requirements in this code, and shall apply to all construction and rehabilitation.
- C. Add Change Section 301.2 to the IEBC to read:
- 301.2 Occupancy and use. When determining the appropriate application of the referenced sections of this code, the occupancy and use of a building shall be determined in accordance with Chapter 3 of the VCC.
- D. Change IEBC Section 302 to Building Materials and Systems.
- E. Change Sections 302.1 through 302.3 302.2 of the IEBC to read:
  - 302.1 Existing materials. Materials already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless the VCC would not permit their use in buildings or structures of similar occupancy, purpose, and location.

302.2 302.1 New and replacement materials. Except as otherwise required or permitted by this code, materials permitted by the applicable code for new construction shall be used. Like materials shall be permitted for repairs and alterations, provided no hazard to life, health or property is created. Hazardous materials shall not be used where the VCC would not permit their use in buildings or structures of similar occupancy, purpose, and location.

- 302.3 302.2 Existing seismic force-resisting systems. Where the existing seismic force-resisting system is a type that can be designated ordinary, values of R,  $\Omega_0$ , and  $C_d$  for the existing seismic force-resisting system shall be those specified by the VCC for an ordinary system unless it is demonstrated that the existing system will provide performance equivalent to that of a detailed, intermediate, or special system.
- F. Delete Sections <del>302.4 and 302.5</del> <u>302.3 through 302.6</u> of the IEBC.
- G. Add Change IEBC Section 303 to Fire escapes.
- H. Add Change Sections 303.1 through 303.3.2, including subsections, and add Sections 303.4 through 303.6, including subsections, to the IEBC to read:
  - 303.1 Where permitted. Fire escapes shall be permitted only as provided for in Sections 303.1.1 through 303.1.4 comply with this section and shall not constitute more than 50% of the required number of exits nor more than 50% of the required exit capacity.
  - 303.1.1 Existing fire escapes. Existing fire escapes shall continue to be accepted as a component in the means of egress in existing buildings only.
  - 303.1.2 New fire escapes. Newly For other than Group I-2, newly constructed fire escapes for existing buildings shall be permitted only where exterior stairs cannot be utilized due to lot lines limiting stair size or due to the sidewalks, alleys, or roads at grade level. New fire escapes shall not incorporate ladders or access by windows.
  - Exception: Fire Replacement fire escapes that are replaced or repaired shall only be required to or existing fire escapes undergoing repairs shall comply with Sections 303.3 and 303.4 if feasible, and if not feasible, such that the replaced or repaired fire escape is not less safe than its existing condition to the greatest extent possible.
  - 303.1.3 Limitations. Fire escapes shall comply with this section and shall not constitute more than 50% of the required number of exits nor more than 50% of the required exit capacity.
  - 303.1.4 Fire escapes required. For other than Group I 2, where more than one exit is required, newly constructed fire escapes complying with Section 303.6 shall be accepted as providing one of the required means of egress. Replacement fire escapes or existing fire escapes undergoing repairs shall comply with Sections 303.3 and 303.4 if feasible, and if not feasible, to the greatest extent possible.
  - 303.2 Location. Where located on the front of the building and where projecting beyond the building line, the lowest landing shall not be less than 7 feet (2134 mm) or more than 12 feet (3658 mm) above grade, and shall be equipped

- with a counterbalanced stairway to the street. In alleyways and thoroughfares less than 30 feet (9144 mm) wide, the clearance under the lowest landing shall not be less than 12 feet (3658 mm).
- 303.3 Construction. The fire escape shall be designed to support a live load of 100 pounds per square foot (4788 Pa) and shall be constructed of steel or other approved noncombustible materials. Fire escapes constructed of wood not less than nominal 2 inches (51 mm) thick are permitted on buildings of Type V construction. Walkways and railings located over or supported by combustible roofs in buildings of Types III and IV construction are permitted to be of wood not less than nominal 2 inches (51 mm) thick.
- 303.4 Dimensions. Stairs shall be at least 22 inches (559 mm) wide with risers not more than, and treads not less than, 8 inches (203 mm) and landings at the foot of stairs not less than 40 inches (1016 mm) wide by 36 inches (914 mm) long, located not more than 9 inches (203 mm) below the door.
- 303.5 Opening protectives. Openings within 10 feet (3048 mm) of newly constructed fire escape stairways shall be protected by fire assemblies having minimum 3/4-hour-fire-resistance ratings.
- Exception: Opening protection shall not be required in buildings equipped throughout with an approved automatic sprinkler system.
- 303.6 Fire escape access and details. Newly constructed fire escapes shall comply with all of the following requirements:
  - 1. Occupants shall have unobstructed access to the fire escape without having to pass through a room subject to locking.
  - 2. Access to a new fire escape shall be through a door, except that windows shall be permitted to provide access from single dwelling units or sleeping units in Group Groups R-1, R-2 and I-1 occupancies or to provide access from spaces having a maximum occupant load of 10 in other occupancy classifications.
  - 2.1. The window shall have a minimum net clear opening of 5.7 square feet  $(0.53\ m^2)$  or 5 square feet  $(0.46\ m^2)$  where located at grade.
  - 2.2. The minimum net clear opening height shall be 24 inches (610 mm) and net clear opening width shall be 20 inches (508 mm).
  - 2.3. The bottom of the clear opening shall not be greater than 44 inches (1118 mm) above the floor.
  - 2.4. The operation of the window shall comply with the operational constraints of the VCC.

- 3. In all buildings of Group E occupancy, up to and including the 12th grade, buildings of Group I occupancy, rooming houses and child care centers, ladders of any type are prohibited on fire escapes used as a required means of egress.
- I. Add IEBC Change Section 304 to Glass replacement and replacement windows.
- J. Add Sections Change Section 304.1 and add Sections 304.2 through 304.3, including subsections, 304.3.1 to the IEBC to read:
  - 304.1 Conformance Replacement glass. In accordance with § 36-99.2 of the Code of Virginia, any replacement glass installed in buildings constructed prior to the first edition of the USBC shall meet the quality and installation standards for glass installed in new buildings as are in effect at the time of installation. In addition, as a requirement of this code, the installation or replacement of glass in buildings constructed under any edition of the USBC shall be as required for new installations shall comply with Chapter 24 of the VCC.
  - 304.2 Replacement window opening devices. In Group R-2 or R-3 buildings containing dwelling units, window opening control devices complying with ASTM F 2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window:
    - 1. The window is operable;
    - 2. The window replacement includes replacement of the sash and the frame;
    - 3. The top of the sill of the window opening is at a height less than 36 inches (915 mm) above the finished floor;
    - 4. The window will permit openings that will allow passage of a 4-inch diameter (102 mm) sphere when the window is in its largest opened position; and
  - 5. The vertical distance from the top of the sill of the window opening to the finished grade or other surface below, on the exterior of the building, is greater than 72 inches (1829 mm).

The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section 1029.2 of the VCC.

### **Exceptions:**

1. Operable windows where the top of the sill of the window opening is located more than 75 feet (22 860 mm) above the finished grade or other surface below, on the exterior of the room, space or building, and that are

- provided with window fall prevention devices that comply with ASTM F 2006.
- 2. Operable windows with openings that are provided with window fall prevention devices that comply with ASTM F 2090.
- 304.3 Replacement window emergency escape and rescue openings. Where windows are required by the VCC or International Residential Code to provide emergency escape and rescue openings in Groups R-2 and R-3 occupancies and one-family and two-family dwellings and townhouses regulated by the International Residential Code, replacement windows shall be exempt from the requirements of Sections 1030.2, 1030.3, and 1030.5 1030.4 of the VCC or Sections R310.2.1, R310.2.2, and R310.2.3 of the International Residential Code, provided the replacement window meets the following conditions:
  - 1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.
  - 2. The replacement of the window is not part of a change of occupancy.
- 304.3.1 Operational constraints. Where bars, grilles, grates, or similar devices are installed over emergency escape and rescue openings as permitted by Section 1030.4 of the VCC, smoke alarms shall also be provided in accordance with Section 907.2.11 of the VCC.
- K. Add IEBC Change Section 305 Seismic force-resisting systems.
- L. Add Change Sections 305.1 and 305.2, including subsections, to the IEBC to read:
  - 305.1 General. Where this code requires consideration of the seismic force-resisting system of an existing building subject to repair, alteration, change of occupancy, addition or relocation moving of existing buildings, the seismic evaluation and design shall be based on Section 305.2 regardless of which compliance method is used.
  - 305.2 Seismic evaluation and design procedures. The seismic evaluation and design shall be based on the procedures specified in the VCC or ASCE 41. The procedures contained in Appendix A of this code shall be permitted to be used as specified in Section 305.2.2.
  - 305.2.1 Compliance with VCC-level seismic forces. Where compliance with the seismic design provisions of the VCC is required, the criteria shall be in accordance with one of the following:

- 1. 100% of the values in the VCC. Where the existing seismic force-resisting system is a type that can be designated as "Ordinary," values of R,  $\Omega_0$ , and  $C_d$  used for analysis in accordance with Chapter 16 of the VCC shall be those specified for structural systems classified as "Ordinary" in accordance with Table 12.2-1 of ASCE 7, unless it can be demonstrated that the structural system will provide performance equivalent to that of a "Detailed," "Intermediate" or "Special" system.
- 2. ASCE 41, using a Tier 3 procedure and the two level performance objective in Table 305.2.1 for the applicable risk category.

Table 305.2.1 Performance Objectives for Use in ASCE 41 for Compliance with VCC-Level Seismic Forces					
Risk Category (Based on VCC Table 1604.5)	Structural Performance Level for Use with BSE- 1E Earthquake Hazard Level	Structural Performance Level for Use with BSE- 2N Earthquake Hazard Level			
I	Life Safety (S-3)	Collapse Prevention (S-5)			
II	Life Safety (S-3)	Collapse Prevention (S-5)			
III	Damage Control (S-2)	Limited Safety (S-4)			
IV	Immediate Occupancy (S-1)	Life Safety (S-3)			

- 305.2.2 Compliance with reduced VCC-level seismic forces. Where seismic evaluation and design is permitted to meet reduced VCC seismic force levels, the criteria used shall be in accordance with one of the following:
  - 1. The VCC using 75% of the prescribed forces. Values of R,  $\Omega_0$  and  $C_d$  used for analysis shall be as specified in Section 305.2.1 of this code.
  - 2. Structures or portions of structures that comply with the requirements of the applicable chapter in Appendix A as specified in Items 2.1 through 2.5 and subject to the limitations of the respective Appendix A chapters shall be deemed to comply with this section.
  - 2.1. The seismic evaluation and design of unreinforced masonry bearing wall buildings in Risk Category I or II are permitted to be based on the procedures specified in Appendix Chapter A1.
  - 2.2. Seismic evaluation and design of the wall anchorage system in reinforced concrete and reinforced masonry wall buildings with flexible diaphragms in Risk Category I or II are permitted to be based on the procedures specified in Chapter A2.

- 2.3. Seismic evaluation and design of cripple walls and sill plate anchorage in residential buildings of light-frame wood construction in Risk Category I or II are permitted to be based on the procedures specified in Chapter A3.
- 2.4. Seismic evaluation and design of soft, weak, or open-front wall conditions in multiunit residential buildings of wood construction in Risk Category I or II are permitted to be based on the procedures specified in Chapter A4.
- 2.5. Seismic evaluation and design of concrete buildings assigned to Risk Category I, II, or III are permitted to be based on the procedures specified in Chapter A5.
- 3. ASCE 41, using the performance objective in Table 305.2.2 for the applicable risk category.

Table 305.2.2

14010 303.2.2					
Performance Objectives for Use in ASCE 41 for Compliance with Reduced VCC-Level Seismic Forces					
Risk Category	Structural Performance Level				
(Based on VCC Table 1604.5)	for Use with BSE-1E Earthquake Hazard Level				
I	Life Safety (S-3)				
II	Life Safety (S-3)				
III	Damage Control (S-2 <sup>a</sup> )				
IV	Immediate Occupancy (S-1)				

- a. Tier 1 evaluation at the Damage Control performance level shall use the Tier 1 Life Safety checklists and Tier 1 Quick Check provision midway between those specified for Life Safety and Immediate Occupancy performance
- M. <u>Delete Sections 305.3 through 305.9, including subsections, of the IEBC.</u>
- N. Add IEBC Section 306 Group B teaching and research Higher education laboratories.
- N. O. Add Section 306.1, including subsections, to the IEBC to read:
  - 306.1 Change of occupancy in existing Group B teaching and research higher education laboratories. Where the use of new or different hazardous materials or a change in the amount of hazardous materials in existing Group B testing and research laboratories in educational occupancies above the 12th grade higher education laboratories would constitute a change of occupancy, this section shall be permitted to be used as an acceptable alternative to compliance with change of occupancy requirements to permit the increased amounts of hazardous materials stipulated without the laboratories being classified as Group H. In addition, as set out in Section 5001.7 of such laboratories shall comply with the applicable operational and maintenance requirements in

<u>Chapter 38 of</u> the SFPC<del>, approval</del>. <u>Approval</u> under this section is contingent upon operational requirements in the SFPC being complied with and maintained.

306.1.1 Hazardous materials in existing Group B teaching and research higher education laboratories. The percentage of maximum allowable quantities of hazardous materials per control area and the number of control areas permitted at each floor level within an existing building shall be permitted to comply with Table 302.6.1(1) in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the VCC or shall be permitted to comply with Table 302.6.1(2) in buildings not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the VCC.

#### Table 306.1.1(1)

Design and Number of Control Areas in Existing Buildings
Equipped throughout with an Automatic Sprinkler System in
Accordance with Section 903.3.1.1 of the VCC with Group B
Teaching and Research Laboratories in Educational Occupancies
above the 12th Grade Higher Education Laboratories

Floor Level		Percentage of the Maximum Allowable Quantity per Control Area <sup>a</sup>	Number of Control Areas per Floor	Fire- Resistance Rating for Fire Barriers and Horizontal Assemblies in Hours <sup>b</sup>
Above	Higher than 20	5	1	2
	10-20	10	1	2
	7-9	25	2	2
Grade	4-6	50	2	2
Plane	3	75	2	1
	2	100	3	1
	1	100	4	1
	1	75	3	1
Below Grade Plane	2	50	2	1
	Lower than 2	Not Allowed	Not Allowed	Not Allowed

- a. Percentage shall be of the maximum allowable quantity per control area shown in Tables 307.1(1) and 307.1(2) of the VCC, with all increases allowed in the notes to those tables.
- b. Separation shall include fire barriers and horizontal assemblies as necessary to provide separation from other portions of the building.

#### Table 306.1.1(2)

Design and Number of Control Areas in Existing Buildings Not Equipped throughout with an Automatic Sprinkler System in Accordance with Section 903.3.1.1 of the VCC with Group B Teaching and Research Laboratories in Educational Occupancies above the 12th Grade Higher Education Laboratories

Floor Level		Percentage of the Maximum Allowable Quantity per Control Area <sup>a</sup>	Number of Control Areas per Floor	Fire- Resistance Rating for Fire Barriers and Horizontal Assemblies in Hours <sup>b</sup>
Above Grade Plane	Higher than 9	5	1	2
	7-9	10	2	2
	4-6	25	2	2
	3	75	2	1
	2	100	3	1
	1	100	4	1
Below Grade Plane	1	75	3	1
	2	50	2	1
	Lower than 2	Not Allowed	Not Allowed	Not Allowed

- a. Percentage shall be of the maximum allowable quantity per control area shown in Tables 307.1(1) and 307.1(2) of the VCC, with all increases allowed in the notes to those tables.
- b. Separation shall include fire barriers and horizontal assemblies as necessary to provide separation from other portions of the building.
- 306.1.2 Automatic fire alarm and detection systems. An automatic  $\underline{A}$  fire alarm system shall be provided throughout the building in accordance with Section 907 of the VCC. An automatic fire detection system shall be provided in the control area in accordance with Section 907 of the VCC where pyrophics or Class 4 oxidizers are used and the building is not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the VCC.
- 306.1.3 System supervision and monitoring. Automatic fire <u>alarm and</u> detection systems shall be electronically supervised and monitored by an approved supervising station or, where approved, shall initiate an audible and visual signal at a constantly attended onsite location.
- 306.1.4 Restricted materials in storage and use. Where approved by the building official, the storage and use of the following hazardous materials prohibited by VCC Table 307.1(1) in buildings not equipped throughout with

an automatic sprinkler system in accordance with Section 903.3.1.1 shall be allowed within a control area at 25% of Table 307.1(1) limits for a building equipped throughout with an automatic sprinkler system:

- 1. Pyrophorics.
- 2. Class 4 oxidizers.

No additional quantity increases shall be allowed. All such materials shall be stored and used in accordance with Sections 3805.2.1 and 3805.2.2 of the SFPC.

- O. P. Add IEBC Section 307 Reroofing and roof repair.
- P. Q. Add Sections 307.1 through 307.7, including subsections, to the IEBC to read:
  - 307.1 Reroofing. Materials and methods of application used for recovering or replacing an existing roof covering shall comply with this section and the applicable requirements of Chapter 15 of the VCC.

### Exceptions:

- 1. Roof replacement of roof recover of existing low-slope roof coverings shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2% (2.0% slope) in Section 1507 of the VCC for roofs that provide positive roof drainage.
- 2. Recovering or replacing an existing roof covering shall not be required to meet the requirement of secondary (emergency overflow) drains or scuppers in Section 1503.4 1502 of the VCC for roofs that provide for positive roof drainage. For the purposes of this exception, existing secondary drainage or scupper systems required in accordance with the VCC shall not be removed unless they are replaced by secondary drains or scuppers designed and installed in accordance with Section 1503.4 1502 of the VCC.
- 307.2 Structural and construction loads. Structural roof components shall be capable of supporting the roof covering system and the material and equipment loads that will be encountered during installation of the system.

### **Exceptions:**

- 1. Structural elements where the additional dead load from the roofing or equipment does not increase the force in the element by more than 5.0%.
- 2. Buildings constructed in accordance with the International Residential Code or the conventional light frame construction methods of the International Building Code and where the dead load from the roofing or equipment is not increased by more than 5.0%.
- 3. Addition of a second layer of roof covering weighing three pounds per square foot (0.1437 kN/m²) or less over an existing, single layer of roof covering.

307.3 Roof replacement. Roof replacement shall include the removal of all existing layers of roof coverings down to the roof deck.

Exception: Where the existing roof assembly includes an ice barrier membrane that is adhered to the roof deck, the existing ice barrier membrane shall be permitted to remain in place and covered with an additional layer of ice barrier membrane in accordance with Section 1507 of the VCC.

- 307.3.1 Roof recover limitation. A roof recover shall not be permitted where any of the following conditions occur:
  - 1. Where the existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
  - 2. Where the existing roof covering is slate, clay, cement, or asbestos-cement tile.
  - 3. Where the existing roof has two or more applications of any type of roof covering.
- 307.3.1 307.3.2 Roof recover. The installation of a new roof covering over an existing roof covering shall be permitted where any of the following conditions occur:
  - 1. Complete and separate roofing systems, such as standing-seam metal roof systems, that are designed to transmit the roof loads directly to the building's structural system and that do not rely on existing roofs and roof coverings for support, shall not require the removal of exiting roof coverings.
  - 2. Metal panel, metal shingle and concrete and clay tile roof coverings shall be permitted to be installed over existing wood shake roofs when applied in accordance with Section 307.4.
  - 3. The application of a new protective coating over an existing spray polyurethane foam roofing system shall be permitted without tear-off of existing roof coverings.
  - 4. Where the new roof covering is installed in accordance with the roof covering manufacturer's approved instructions.

Exceptions: A roof recover shall not be permitted where any of the following conditions occur:

- 1. Where the existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
- 2. Where the existing roof covering is slate, clay, cement, or asbestos cement tile.
- 3. Where the existing roof has two or more applications of any type of roof covering.

- 307.4 Roof recovering. Where the application of a new roof covering over wood shingle or shake roofs creates a combustible concealed space, the entire existing surface shall be covered with gypsum board, mineral fiber, glass fiber or other approved materials securely fastened in place.
- 307.5 Reinstallation of materials. Existing slate, clay, or cement tile shall be permitted for reinstallation, except that damaged, cracked or broken slate or tile shall not be reinstalled. Existing vent flashing, metal edgings, drain outlets, collars, and metal counter-flashings shall not be reinstalled where rusted, damaged, or deteriorated. Aggregate surfacing materials shall not be reinstalled.
- 307.6 Flashings. Flashings shall be reconstructed in accordance with approved manufacturer's installation instructions. Metal flashing to which bituminous materials are to be adhered shall be primed prior to installation.
- 307.7 Roof repair. Roof repairs shall comply with this section. Work on nondamaged components that is necessary for the required repair of damaged components shall be considered part of the roof repair and shall not be subject to the requirements of other parts of this code.

Exception: Routine maintenance required by this section, ordinary repairs exempt from permit in accordance with Section 108.2 of the VCC, and abatement of wear due to normal service conditions shall not be subject to the requirements for roof repairs in this section.

- 307.7.1 Building materials and systems. Building materials and systems shall comply with the requirements of Sections Section 307.7.1.1 and 307.7.1.2.
- 307.7.1.1 Existing materials. Materials already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the building official to be unsafe.
- 307.7.1.2 307.7.1.1 New and replacement materials. Except as otherwise required or permitted by this code, materials permitted by the applicable code for new construction shall be used. Like materials shall be permitted for repairs, provided no hazard to life, health or property is created. Hazardous materials shall not be used where the code for new construction would not permit their use in buildings of similar occupancy, purpose and location.

### 13VAC5-63-432.5. Chapter 4 Accessibility.

- A. Change IEBC Section 401 to General.
- B. A. Change Section 401.1 of the IEBC to read:
- 401.1 Scope. The applicable provisions of this chapter shall apply to all construction and rehabilitation.

- $\leftarrow$  B. Delete Sections 401.1.1 401.2 through 401.3 of the IEBC.
- D. C. Change IEBC Section 402 of to Change of Occupancy.
- E. D. Change Sections Section 402.1 through and add Sections 402.2 and 402.3 of to the IEBC to read:
  - 402.1 Change of occupancy. Existing buildings or structures that undergo a change of occupancy shall comply with this section.

Exception: Type B dwelling or sleeping units required by Section 1107 of the VCC are not required to be provided in existing buildings and facilities undergoing a change of occupancy in conjunction with <u>Level 2</u> alterations where the work area intended portion of a building or structure involving walls that are added, relocated, or removed is 50% or less of the aggregate area of the building area.

- 402.2 Partial change in occupancy. Where a portion of the building is changed to a new occupancy classification, additional accessible features are not required due to the change of occupancy.
- 402.3 Complete change of occupancy. Where an entire building undergoes a change of occupancy classification, it shall have all of the following accessible features:
  - 1. At least one accessible building entrance.
- 2. At least one accessible route from an accessible building entrance to primary function areas.
- 3. Signage complying with Section 1111 of the VCC.
- 4. Accessible parking, where parking is being provided.
- 5. At least one accessible passenger loading zone, when loading zones are provided.
- 6. At least one accessible route connecting accessible parking and accessible passenger loading zones to an accessible entrance.

Where it is technically infeasible to comply with the new construction standards for any of these requirements of a change of occupancy, Items 1 through 6 shall conform to the requirements to the maximum extent technically feasible.

Exception: The accessible features listed in Items 1 through 6 are not required for an accessible route to Type B units

- F. Delete Sections 402.3.1, 402.4 and 402.5 of the IEBC.
- G. E. Change IEBC Section 403 to Additions.

- H. F. Change Sections Section 403.1 through 403.3 of the IEBC to read:
  - 403.1 Additions. Accessibility provisions for new construction shall apply to additions. An addition that affects the accessibility to, or contains an area of, a primary function shall comply with the requirements in Section 410.7 404.3, as applicable.

### G. Add Sections 403.2 through 403.4 to the IEBC to read:

- 403.2 Accessible dwelling units and sleeping units. Where Group I-1, I-2, I-3, R-1, R-2, or R-4 dwelling or sleeping units are being added, the requirements of Section 1107 of the VCC for accessible units apply only to the quantity of spaces being added.
- 403.3 Type A dwelling or sleeping units. Where more than 20 Group R-2 dwelling or sleeping units are being added, the requirements of Section 1107 of the VCC for Type A units and Chapter 9 of the VCC for visible alarms apply only to the quantity of the spaces being added.

## I. Delete Section 403.3.1.

### J. Change Section 403.4 of the IEBC to read:

403.4 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3, or R-4 dwelling or sleeping units are being added, the requirements of Section 1107 of the VCC for Type B units and Chapter 9 of the VCC for visible alarms apply only to the quantity of spaces being added.

# K. Delete Sections 403.4.1 through 403.11, including subsections, of the IEBC.

- L. H. Change IEBC Section 404 to Alterations.
- M. <u>I.</u> Change <u>Sections</u> <u>Section</u> 404.1 <u>through 404.4.15</u>, <u>including subsections</u>, of the IEBC to read:
  - 404.1 General. An alteration of an existing facility shall not impose a requirement for greater accessibility than that which would be required for new construction. Alterations shall not reduce or have the effect of reducing accessibility of a facility or portion of a facility.

# J. Add Sections 404.2 through 404.4.15, including subsections, to the IEBC to read:

404.2 Alterations. A facility that is altered shall comply with the applicable provisions in this section and Chapter 11 of the VCC, except as modified by Sections 404.3 and 404.4, unless technically infeasible. Where compliance with this section is technically infeasible, the alteration shall provide access to the maximum extent technically feasible.

### Exceptions:

1. The altered element or space is not required to be on an accessible route, unless required by Section 404.3.

- 2. Accessible means of egress required by Chapter 10 of the VCC are not required to be provided in existing facilities.
- 3. The alteration to Type A individually owned dwelling units within a Group R-2 occupancy shall be permitted to meet the provision for a Type B dwelling unit.
- 4. Type B dwelling or sleeping units required by Section 1107 of the VCC are not required to be provided in existing buildings and facilities undergoing a change of occupancy in conjunction with alterations where the work area is 50% or less of the aggregate area of the building.
- 404.3 Alterations affecting an area containing a primary function. Where an alteration affects the accessibility to, or contains an area of primary function, the route to the primary function area shall be accessible. The accessible route to the primary function area shall include toilet facilities and drinking fountains that shall also be accessible to and useable by individuals with disabilities, serving the area of primary function.

### Exceptions:

- 1. The costs of providing the accessible route are not required to exceed 20% of the costs of the alterations affecting the area of primary function.
- 2. This provision does not apply to alterations limited solely to windows, hardware, operating controls, electrical outlets and signs.
- 3. This provision does not apply to alterations limited solely to mechanical systems, electrical systems, installation or alteration of fire protection systems and abatement of hazardous materials.
- 4. This provision does not apply to alterations undertaken for the primary purpose of increasing the accessibility of a facility.
- 5. This provision does not apply to altered areas limited to Type B dwelling and sleeping units.
- 404.4 Scoping for alterations. The provisions of Sections 404.4.1 through 404.4.14 shall apply to alterations to existing buildings and facilities.
- 404.4.1 Entrances. Where an alteration includes alterations to an entrance, and the facility has an accessible entrance on an accessible route, the altered entrance is not required to be accessible unless required by Section 404.3. Signs complying with Section 1111 of the VCC shall be provided.

Exception: Where an alteration includes alterations to an entrance, and the facility has an accessible entrance, the altered entrance is not required to be accessible, unless

required by Section 410.7 404.3. Signs complying with Section 1111 of the VCC shall be provided.

404.4.2 Elevators. Altered elements of existing elevators shall comply with ASME A17.1/CSA B44 and ICC A117.1. Such elements shall also be altered in elevators programmed to respond to the same hall call control as the altered elevator.

404.4.3 Platform lifts. Platform (wheelchair) lifts complying with ICC A117.1 and installed in accordance with ASME A18.1 shall be permitted as a component of an accessible route.

404.4.4 Stairways and escalators. In alterations, change of occupancy or additions where Where an escalator or stairway is added where none existed previously and major structural modifications are necessary for installation, an accessible route shall be provided between the levels served by the escalator or stairways in accordance with Section 1104.4 of the VCC.

404.4.5 Ramps. Where steeper slopes than allowed by Section 1012.2 of the VCC are necessitated by space limitations, the slope of ramps in or providing access to existing facilities shall comply with Table 404.4.5.

Table 404.4.5				
Ramps				
Slope	Maximum Rise			
Steeper than 1:10 but not steeper than 1:8	3 inches			
Steeper than 1:12 but not steeper than 1:10	6 inches			
For SI: 1 inch = 25.4 mm				

404.4.6 Accessible dwelling or sleeping units. Where Group I-1, I-2, I-3, R-1, R-2, or R-4 dwelling or sleeping units are being altered, the requirements of Section 1107 of the VCC for Accessible units apply only to the quantity of the spaces being altered.

404.4.7 Type A dwelling or sleeping units. Where more than 20 Group R-2 dwelling or sleeping units are being altered, the requirements of Section 1107 of the VCC for Type A units and Chapter 9 of the VCC for visible alarms apply only to the quantity of the spaces being altered.

404.4.8 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3, or R-4 dwelling or sleeping units are being altered and where the work area is greater than 50% of the aggregate area of the building, the requirements of Section 1107 of the VCC for Type B units and Chapter 9 of the VCC for visible alarms apply only to the quantity of the spaces being altered.

Exceptions: Group Groups I-1, I-2, R-2, R-3, and R-4 dwelling or sleeping units where the first certificate of occupancy was issued before March 15, 1991, are not required to provide Type B dwelling or sleeping units.

404.4.9 Jury boxes and witness stands. In alterations, accessible wheelchair spaces are not required to be located within the defined area of raised jury boxes or witness stands and shall be permitted to be located outside these spaces where ramp or lift access poses a hazard by restricting or projecting into a required means of egress.

404.4.10 Toilet <u>and bathing</u> rooms. Where it is technically infeasible to alter existing toilet and bathing rooms to be accessible, an accessible <u>single-user or</u> family or assisteduse toilet or bathing room constructed in accordance with Section 1109.2.1 of the VCC is permitted. The <u>single-user or</u> family or assisted-use toilet or bathing room shall be located on the same floor and in the same area as the existing toilet or bathing rooms. At the inaccessible toilet and bathing rooms, provide directional signs indicating the location of the nearest <u>single-user or</u> family or assisted-use toilet room or bathing room. These directional signs shall include the International Symbol of Accessibility and sign characters shall meet the visual character requirements in accordance with ICC A117.1.

404.4.11 Dressing, fitting and locker rooms. Where it is technically infeasible to provide accessible dressing, fitting or locker rooms at the same location as similar types of rooms, one accessible room on the same level shall be provided. Where separate-sex facilities are provided, accessible rooms for each sex shall be provided. Separate sex facilities are not required where only unisex rooms are provided.

404.4.12 Fuel dispensers. Operable parts of replacement fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum, measuring from the surface of the vehicular way where fuel dispensers are installed on existing curbs.

404.4.13 Thresholds. The maximum height of thresholds at doorways shall be 3/4 inch (19.1 mm). Such thresholds shall have beveled edges on each side.

404.4.14 Amusement rides. Where the structural or operational characteristics of an amusement ride are altered to the extent that the amusement ride's performance differs from that specified by the manufacturer or the original design, the amusement ride shall comply with requirements for new construction in Section 1110.4.8 of the VCC.

404.4.15 Dining areas. An accessible route to raised or sunken dining areas or to outdoor seating areas is not required provided that the same services and décor are provided in an accessible space usable by any occupant and not restricted to use by people with a disability.

N. Delete Sections 404.2.1, 404.2.2, 404.2.3, 404.3.1 and 404.5 of the IEBC.

- O. K. Change Section 405 to Historic Buildings.
- P. L. Change Section 405.1, including subsections, to read:

405.1 General. These provisions shall apply to facilities designated as historic buildings or structures that undergo alterations or a change of occupancy, unless technically infeasible. Where compliance with the requirements for accessible routes, entrances or toilet rooms would threaten or destroy the historic significance of the facility, the alternative requirements of Sections 405.1.1 through 405.1.4 for that element shall be permitted.

Exception: Type B dwelling or sleeping units required by Section 1107 of the VCC are not required to be provided in historical buildings.

# M. Add Sections 405.1.1 through 405.1.4 to the IEBC to read:

- 405.1.1 Site arrival points. At least one accessible route from a site arrival point to an accessible entrance shall be provided.
- 405.1.2 Multilevel buildings and facilities. An accessible route from an accessible entrance to public spaces on the level of the accessible entrance shall be provided.
- 405.1.3 Entrances. At least one main entrance shall be accessible.

### Exceptions:

- 1. If a main entrance cannot be made accessible, an accessible nonpublic entrance that is unlocked while the building is occupied shall be provided; or
- 2. If a main entrance cannot be made accessible, a locked accessible entrance with a notification system or remote monitoring shall be provided.

Signs complying with Section 1111 of the VCC shall be provided at the primary entrance and the accessible entrance.

- 405.1.4 Toilet and bathing facilities. Where toilet rooms are provided, at least one accessible <u>single-user or</u> family or assisted-use toilet <u>or bathing</u> room complying with Section 1109.2.1 of the VCC shall be provided.
- Q. N. Delete Sections 405.2 through 405.5 405.2.5, including subsections, of the IEBC.
- R. O. Delete Sections 406, 407, and 408, 409 and 410 of the IEBC in their entirety.

## 13VAC5-63-433. Chapter 5 Repairs.

A. Change Section 501.1 and 501.2 of the IEBC to read:

501.1 Scope. Repairs, including the patching or restoration or replacement of damaged materials, elements, equipment or fixtures for the purpose of maintaining such components in good or sound condition with respect to existing loads or performance requirements, shall comply with the requirements of this chapter. Repairs to historic buildings need only comply with Chapter 9. Portions of the existing building or structure not being repaired shall not be required to comply with the requirements of this code applicable to newly constructed buildings or structures. Work on nondamaged components that is necessary for the required repair of damaged components shall be considered part of the repair and shall not be subject to the provisions of Chapter 6, 7 or 8. Routine maintenance required by Section 302, ordinary repairs exempt from permit in accordance with Section 108.2 of the VCC, and abatement of wear due to normal service conditions shall not be subject to the requirements for repairs in this section.

Exception: Repairs complying with the requirements of the building code under which the building or structure or the affected portions thereof was built, or as previously approved by the building official, shall be considered in compliance with the provisions of this code, unless the building or structure or the affected portions thereof is undergoing a substantial structural alteration as described in Section 604.7.1. New structural members added as part of the alteration or repairs shall comply with the VCC. Repairs of existing buildings in flood hazard areas shall comply with Section 503.

- 501.2 Conformance. The work shall not make the building less conforming than it was before the repair was undertaken. Repairs shall be done in a manner that maintains the following:
  - 1. Level of fire protection that is existing.
  - 2. Level of protection that is existing for the means of egress.
  - 3. Level of accessibility that is existing.
- B. Delete Section 501.1.1 of the IEBC.
- C. Change Section 502 to Structural.
- D. Change Sections 502.1 and 502.2, including subsections, of through 502.4 and add Section 502.4.1 to the IEBC to read:
  - 502.1 General. Structural repairs shall be in compliance with this section and Section 501.2. Regardless of the scope of repair, new structural members and connections used for repair or rehabilitation shall comply with the detailing provisions of the VCC for new buildings of similar structure, purpose and location.

502.2 Repairs to damaged buildings. Repairs to damaged buildings shall comply with this section.

502.2.1 502.2 Less than substantial structural damage. For damage less than substantial structural damage, repairs shall be allowed that restore the building to its predamage state. New structural members and connection used for this repair shall comply with the detailing provisions of the VCC for new buildings of similar structure, purpose, and location.

502.2.2 502.3 Substantial structural damage to vertical elements of the lateral force-resisting system. A building that has sustained substantial structural damage to the vertical elements of its lateral force-resisting system shall be evaluated in accordance with Section 502.2.2.1 502.3.1 and either repaired in accordance with Section 502.2.2. 502.3.2 or repaired and rehabilitated in accordance with Section 502.2.2.3 502.3.3, depending on the results of the evaluation.

### **Exceptions:**

- 1. Buildings assigned to Seismic Design Category A, B, or C whose substantial structural damage was not caused by earthquake need not be evaluated or rehabilitated for load combinations that include earthquake effects.
- 2. One-family and two-family dwellings need not be evaluated or rehabilitated for load combinations that include earthquake effects.

502.2.2.1 502.3.1 Evaluation. The building shall be evaluated by a registered design professional, and the evaluation findings shall be submitted to the building official. The evaluation shall establish whether the damaged building if repaired to its predamage state, would comply with the provisions of the VCC for load combinations that include wind or earthquake effects, except that the seismic forces shall be the reduced VCC-level seismic forces.

Wind loads for this evaluation shall be those prescribed in Section 1609 of the VCC. Earthquake loads for this evaluation, if required, shall be permitted to be 75% of those prescribed in Section 1613 of the VCC. Alternatively, compliance with ASCE 41, using the performance objective in Table 305.2.2 for the applicable risk category, shall be deemed to meet the earthquake evaluation requirement.

502.2.2.2 502.3.2 Extent of repair for compliant buildings. If the evaluation establishes that the building in its predamage condition complies with the provisions of Section 502.2.2.1 502.3.1, then repairs shall be permitted that restore the building to its predamage state.

502.2.2.3 502.3.3 Extent of repair for noncompliant buildings. If the evaluation does not establish that the building in its predamage condition complies with the

provisions of Section 502.2.2.1 502.3.1, then the building shall be rehabilitated to comply with the provisions of this section. The wind loads for the repair shall be as required by the building code in effect at the time of original construction, unless the damage was caused by wind, in which case the wind loads shall be in accordance with the VCC. The earthquake loads for this rehabilitation design shall be those required by the building code in effect at the time of original construction, but not less than the reduced VCC-level seismic forces. New structural members and connections required by this rehabilitation design shall comply with the detailing provisions of the VCC for new buildings of similar structure, purpose and location. Alternatively, compliance with ASCE 41, using the performance objective in Table 305.2.2 for the applicable risk category, shall be deemed to meet the earthquake rehabilitation requirement.

502.2.3 502.4 Substantial structural damage to gravity load-carrying components. Gravity load-carrying components that have sustained substantial structural damage shall be rehabilitated to comply with the applicable provisions for dead and live loads in the VCC. Snow loads shall be considered if the substantial structural damage was caused by or related to snow load effects. Existing gravity load carrying structural elements shall be permitted to be designed for live loads approved prior to the damage. If the approved live load is less than that required by Section 1607 of the VCC, the area designed for the nonconforming live load shall be posted with placards of approved design indicating the approved live load. Nondamaged gravity load-carrying components that receive dead, live, or snow loads from rehabilitated components shall also be rehabilitated if required to comply with the design loads of the rehabilitation design, or shown to have the capacity to carry the design loads of the rehabilitation design. New structural members and connections required by this rehabilitation design shall comply with the detailing provisions of the VCC for new buildings of similar structure purpose and location.

502.2.3.1 502.4.1 Lateral force-resisting elements. Regardless of the level of damage to gravity elements of the lateral force-resisting system, if substantial structural damage to gravity load-carrying components was caused primarily by wind or earthquake effects, then the building shall be evaluated in accordance with Section 502.2.2.1 502.3.1 and, if noncompliant, rehabilitated in accordance with Section 502.2.2.3 502.3.3.

### **Exceptions:**

1. Buildings assigned to Seismic Design Category A, B, or C whose substantial structural damage was not caused by earthquake need not be evaluated or rehabilitated for load combinations that include earthquake effects.

- 2. One-family and two-family dwellings need not be evaluated or rehabilitated for load combinations that include earthquake effects.
- E. Delete Section 502.3 Sections 502.5 through 502.8 of the IEBC.
- F. Change Section 503 to Flood Hazard Areas.
- G. Change Section 503.1 of the IEBC to read:
- 503.1 Flood hazard areas. For buildings and structures, in flood hazard areas established in Section 1612.3 of the VCC, or Section R322 of the International Residential Code, as applicable, any repair that constitutes substantial improvement or repair of substantial damage of the existing building or structure shall comply with the flood design requirements for new construction and all aspects of the existing building or structure shall be brought into compliance with the requirements for new construction for flood design.

For buildings and structures in flood hazard areas established in Section 1612.3 of the VCC, or Section R322 of the International Residential Code, as applicable, any repairs that do not constitute substantial improvement or repair of substantial damage of the existing building or structure are not required to comply with the flood design requirements for new construction.

- H. Delete <u>Section Sections</u> 503.2 <u>through 503.16.3</u>, including subsections, of the IEBC.
- I. Change Section 504 to Electrical.
- J. Change Section 504.1, including subsections, and add section 504.1.5 of the IEBC to read:
  - 504.1 Material. Existing electrical wiring and equipment undergoing repair shall be allowed to be repaired or replaced with like material.
  - 504.1.1 Receptacles. Replacement of electrical receptacles shall comply with the applicable requirements of Section 406.4(D) of NFPA 70.
  - 504.1.2 Plug fuses. Plug fuses of the Edison-base type shall be used for replacements only where there is no evidence of over fusing or tampering per applicable requirements of Section 240.51(B) of NFPA 70.
  - 504.1.3 Nongrounding-type receptacles. For replacement of nongrounding-type receptacles with grounding-type receptacles and for branch circuits that do not have an equipment grounding conductor in the branch circuitry, the grounding conductor of a grounding-type receptacle outlet shall be permitted to be grounded to any accessible point on the grounding electrode system or to any accessible point on the grounding electrode conductor in accordance with Section 250.130(C) of NFPA 70.

- 504.1.4 Group I-2 receptacles. Non-"hospital grade" receptacles in patient bed locations of Group I-2 shall be replaced with "hospital grade" receptacles, as required by NFPA 99 and Article 517 of NFPA 70.
- 504.1.5 Grounding of appliances. Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers and outlet or junction boxes that are part of the existing branch circuit for these appliances shall be permitted to be grounded to the grounded circuit conductor in accordance with Section 250.140 of NFPA 70.
- K. Delete Section Sections 504.2 through 504.5 of the IEBC.
- L. Change Section 505 to Mechanical.
- M. Change Sections 505.1 and 505.2 of the IEBC to read:
- 505.1 General. Existing mechanical systems undergoing repair shall not make the building less conforming than it was before the repair was undertaken.
- 505.2 Mechanical draft systems for manually fired appliances and fireplaces. A mechanical draft system shall be permitted to be used with manually fired appliances and fireplaces where such a system complies with all of the following requirements:
  - 1. The mechanical draft device shall be listed and installed in accordance with the manufacturer's installation instructions.
  - 2. A device shall be installed that produces visible and audible warning upon failure of the mechanical draft device or loss of electrical power at any time that the mechanical draft device is turned on. This device shall be equipped with a battery backup if it receives power from the building wiring.
  - 3. A smoke detector shall be installed in the room with the appliance or fireplace. This device shall be equipped with a battery backup if it receives power from the building wiring.
- N. Delete Sections 505.3 and 505.4 of the IEBC.
- O. Change Section 506 to Plumbing.
- O. P. Change Sections 506.1 and 506.2 of the IEBC to read:
- 506.1 Materials. Plumbing materials and supplies shall not be used for repairs that are prohibited in the International Plumbing Code.
- 506.2 Water closet replacement. The maximum water consumption flow rates and quantities for all replaced water closets shall be 1.6 gallons (6 L) per flushing cycle.

Exception: Blowout-design water closets 3.5 gallons (13 L) per flushing cycle.

- P. Q. Delete Section 506.1.1 and Sections 506.3 through 506.4.4, including subsections, of the IEBC.
- R. Delete Section 507 of the IEBC in its entirety.
- Q. Delete Section 508 of the IEBC in its entirety.
- R. Delete Section 509 of the IEBC in its entirety.

### 13VAC5-63-433.3. Chapter 6 Alterations.

- A. Change Sections 601.1 through 601.5, including subsections, and 601.2 of the IEBC to read:
  - 601.1 General. Except as provided by Section 905.1 modified in Chapter 9 or this chapter, alterations to any building or structure shall comply with the requirements of the VCC for new construction. Alterations shall be such that the existing building or structure is no less conforming to the provisions of the VCC than the existing building or structure was prior to the alteration. Portions of the building or structure not being altered shall not be required to comply with the requirements of the VCC.

## **Exceptions:**

- 1. Any stairway replacing an existing stairway shall not be required to comply with the requirements of Section 1011 of the VCC where the existing space and construction does not allow a reduction in pitch or slope.
- 2. Handrails otherwise required to comply with Section 1011.11 of the VCC shall not be required to comply with the requirements of Section 1014.6 of the VCC regarding full extension of the handrails where such extensions would be hazardous due to plan configuration.
- 3. Where the current level of safety or sanitation is proposed to be reduced, the portion altered shall conform to the requirements of the VCC.
- 4. Alterations complying with the requirements of the building code under which the building or structure or the affected portions thereof was built, or as previously approved by the building official, shall be considered in compliance with the provisions of this code, unless the building or structure or the affected portions thereof is undergoing a substantial structural alteration as described in Section 604.7.1. New structural members added as part of the alteration or repairs—shall comply with the VCC. Alterations of existing buildings in flood hazard areas shall comply with Section 601.3.
- 601.2 Levels of alterations. Alterations to any building or structure shall be classified as the following:

## B. Delete Section 601.1.1.

- <u>C. Add Sections 601.2.1 through 601.5, including</u> subsections, to the IEBC to read:
  - 601.2.1 Level 1. Level 1 alterations include the removal and replacement or the covering of existing materials,

- elements, equipment, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose, or the removal without replacement of materials, elements, equipment, or fixtures. Level 1 alterations shall comply with the applicable provisions Section 602.
- 601.2.2 Level 2. Level 2 alterations shall comply with the applicable provisions of Sections 602 and 603 and shall include the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment and shall apply where the work area is less than 50% of the building area. Level 2 alterations shall comply with the applicable provisions Sections 602 and 603.
- 601.2.3 Level 3. Level 3 alterations apply where the work area exceeds 50% of the building area. Level 3 alterations shall comply with the applicable provisions of Sections 602, 603 and 604.
- 601.2.3.1 Special provisions. A building separated horizontally in compliance with VCC Section 510.2 shall be considered as separate and distinct buildings for the purpose of determining building area used for application of Section 601.2.3. the following:
  - 1. The addition or elimination of any door or window.
  - 2. The addition of elimination of any wall, floor, or ceiling assembly.
  - 3. The reconfiguration or extension of any system.
  - 4. The installation of any addition equipment.
- 601.3 Flood hazard areas. In flood hazard areas, alterations that constitute substantial improvement shall require that the building comply with Section 1612 of the VCC or Section R322 of the International Residential Code, as applicable.
- 601.4 Energy conservation. Level 1, 2, and 3 alterations to existing buildings or structures are permitted without requiring the entire building or structure to comply with the energy requirements of the International Energy Conservation Code or International Residential Code. The alterations shall conform to the energy requirements of the International Energy Conservation Code or International Residential Code as they relate to new construction only.
- Exception: Except for window and door openings, like materials, assemblies or thicknesses shall be permitted for alterations involving the exterior building thermal envelope, provided no hazard to life, health or property is created. Hazardous materials shall not be used where the code for new construction would not permit their use in buildings of similar occupancy, purpose and location.
- 601.5 Accessibility. Accessibility shall be provided in accordance with applicable provisions of Section 404.

- B. Change Section 602 to Level 1 Alterations.
- C. D. Change Sections 602.1 through 602.3 and 602.2; including subsections, of the IEBC to read:
  - 602.1 Scope. Level 1 alterations as described in Section 601.2.1 shall comply with the requirements of this section. Level 1 alterations to historic buildings shall comply with this chapter, except as modified in Chapter 9.
  - 602.2 Conformance. Alterations shall be done in a manner that maintains the following:
    - 1. Level of fire protection that is existing.
    - 2. Level of protection that is existing for the means of egress.

### E. Add Sections 602.3 through 602.3.5 to the IEBC to read:

- 602.3 Building elements and materials. Building elements and materials shall comply with the applicable provisions of Sections 302 and 602.3.1 through 602.3.5 602.3.3.
- 602.3.1 Interior finishes <u>and trim</u>. All newly installed interior <u>finish and trim materials and wall, floor,</u> and ceiling finishes shall comply with Chapter 8 of the VCC.
- 602.3.2 Interior floor finish. New interior floor finish, including new carpeting used as an interior floor finish material, shall comply with Section 804 of the VCC.
- 602.3.3 Interior trim. All newly installed interior trim materials shall comply with Section 806 of the VCC.
- 602.3.4 602.3.2 Materials and methods. All new work building elements and materials shall comply with the materials and methods requirements in the VCC, International Energy Conservation Code, International Mechanical Code, and International Plumbing Code, as applicable, that specify material standards, detail of installation and connection, joints, penetrations, and continuity of any element, component, or system in the building.
- 602.3.5 602.3.3 International Fuel Gas Code. The following sections of the International Fuel Gas Code shall constitute the fuel gas materials and methods requirements for Level 1 alterations.
  - 1. All of Chapter 3, entitled "General Regulations," except Sections 303.7 and 306.
  - 2. All of Chapter 4, entitled "Gas Piping Installations," except Sections 401.8 and 402.3.2.1. Sections 401.8 and 402.3 shall apply when the work being performed increases the load on the system such that the existing pipe does not meet the size required by code. Existing systems that are modified shall not require resizing as long as the load on the system is not increased and the system length is not increased even if the altered system does not meet code minimums.

- 3. All of Chapter 5, entitled "Chimneys and Vents."
- 4. All of Chapter 6, entitled "Specific Appliances."

#### D. Change Section 603 to Level 2 Alterations.

- E. F. Change Section 603.1 and 603.2, and add Sections 603.2 603.3 through 603.10 603.7.6, including subsections, of to the IEBC to read:
  - 603.1 Scope. Level 2 alterations as described in Section 601.2.2 shall comply with the requirements of this section.

Exception: Buildings in which the alteration is exclusively the result of compliance with the accessibility requirements of Section 404.3 shall be permitted to comply with Section 602.

- 603.2 Level 1 alteration compliance. In addition to the requirements of this section, all work alterations shall comply with the applicable requirements of Section 602.
- 603.3 Compliance. All new construction elements, components, systems, and spaces shall comply with the requirements of the VCC.

### Exceptions:

- 1. Windows may be added without requiring compliance with the light and ventilation requirements of the VCC.
- 2. Newly installed electrical equipment shall comply with the requirements of Section 603.8.
- 3. The length of dead end corridors in newly constructed spaces shall only be required to comply with the provisions of Section 603.6.5.
- 2. Where an approved automatic sprinkler system is installed throughout the story, the required fire-resistance rating for any corridor located on the story shall be permitted to be reduced in accordance with the VCC. In order to be considered for a corridor rating reduction, such system shall provide coverage for the stairway landings serving the floor and the intermediate landings immediately below.
- 3. In other than Groups A and H occupancies, the maximum length of a newly constructed or extended dead-end corridor shall not exceed 50 feet (15240 mm) on floors equipped with an automatic sprinkler system installed in accordance with the VCC.
- 4. The minimum ceiling height of the newly created habitable and occupiable spaces and corridors shall be 7 feet (2134 mm).
- 5. Where provided in below-grade transportation stations, new escalators shall be permitted to have a clear width of less than 32 inches (815 mm).
- 603.4 Building elements and materials. The requirements of Section 603.4 are limited to work areas in which Level 2

- alterations are being performed and shall apply beyond the work area where specified.
- 603.4.1 Vertical openings. Existing vertical openings shall comply with the provisions of Sections 603.4.1.1, 603.4.1.2, and 603.4.1.3.
- 603.4.1.1 Existing vertical openings. Existing interior vertical openings connecting two or more floors shall be enclosed with approved assemblies having a fire resistance rating of not less than one hour with approved opening protectives.

## **Exceptions:**

- 1. Where vertical opening enclosure is not required by the VCC or the International Fire Code.
- 2. Interior vertical openings other than stairways may be blocked at the floor and ceiling of the work area by installation of not less than 2 inches (51 mm) of solid wood or equivalent construction.
- 3. The enclosure shall not be required where:
- 3.1. Connecting the main floor and mezzanines; or
- 3.2. All of the following conditions are met:
- 3.2.1. The communicating area has a low hazard occupancy or has a moderate hazard occupancy that is protected throughout by an automatic sprinkler system.
- 3.2.2. The lowest or next to the lowest level is a street floor.
- 3.2.3. The entire area is open and unobstructed in a manner such that it may be assumed that a fire in any part of the interconnected spaces will be readily obvious to all of the occupants.
- 3.2.4. Exit capacity is sufficient to provide egress simultaneously for all occupants of all levels by considering all areas to be a single floor area for the determination of required exit capacity.
- 3.2.5. Each floor level, considered separately, has at least one half of its individual required exit capacity provided by exits leading directly out of that level without having to traverse another communicating floor level or be exposed to the smoke or fire spreading from another communicating floor level.
- 4. In Group A occupancies, a minimum 30 minute enclosure shall be provided to protect all vertical openings not exceeding three stories.
- 5. In Group B occupancies, a minimum 30 minute enclosure shall be provided to protect all vertical openings not exceeding three stories. This enclosure, or the enclosure specified in Section 603.4.1.1, shall not be required in the following locations:

- 5.1. Buildings not exceeding 3,000 square feet (279 m<sup>2</sup>) per floor.
- 5.2. Buildings protected throughout by an approved automatic fire sprinkler system.
- 6. In Group E occupancies, the enclosure shall not be required for vertical openings not exceeding three stories when the building is protected throughout by an approved automatic fire sprinkler system.
- 7. In Group F occupancies, the enclosure shall not be required in the following locations:
- 7.1. Vertical openings not exceeding three stories.
- 7.2. Special purpose occupancies where necessary for manufacturing operations and direct access is provided to at least one protected stairway.
- 7.3. Buildings protected throughout by an approved automatic sprinkler system.
- 8. In Group H occupancies, the enclosure shall not be required for vertical openings not exceeding three stories where necessary for manufacturing operations and every floor level has direct access to at least two remote enclosed stairways or other approved exits.
- 9. In Group M occupancies, a minimum 30 minute enclosure shall be provided to protect all vertical openings not exceeding three stories. This enclosure, or the enclosure specified in Section 603.4.1.1, shall not be required in the following locations:
- 9.1. Openings connecting only two floor levels.
- 9.2. Occupancies protected throughout by an approved automatic sprinkler system.
- 10. In Group R 1 occupancies, the enclosure shall not be required for vertical openings not exceeding three stories in the following locations:
- 10.1. Buildings protected throughout by an approved automatic sprinkler system.
- 10.2. Buildings with less than 25 dwelling units or sleeping units where every sleeping room above the second floor is provided with direct access to a fire escape or other approved second exit by means of an approved exterior door or window having a sill height of not greater than 44 inches (1118 mm) and where:
- 10.2.1. Any exit access corridor exceeding 8 feet (2438 mm) in length that serves two means of egress, one of which is an unprotected vertical opening, shall have at least one of the means of egress separated from the vertical opening by a one hour fire barrier; and
- 10.2.2. The building is protected throughout by an automatic fire alarm system, installed and supervised in accordance with the VCC.

- 11. In Group R-2 occupancies, a minimum 30-minute enclosure shall be provided to protect all vertical openings not exceeding three stories. This enclosure, or the enclosure specified in Section 603.4.1.1, shall not be required in the following locations:
- 11.1. Vertical openings not exceeding two stories with not more than four dwelling units per floor.
- 11.2. Buildings protected throughout by an approved automatic sprinkler system.
- 11.3. Buildings with not more than four dwelling units per floor where every sleeping room above the second floor is provided with direct access to a fire escape or other approved second exit by means of an approved exterior door or window having a sill height of not greater than 44 inches (1118 mm) and the building is protected throughout by an automatic fire alarm system complying with Section 603.5.4.
- 12. One family and two family dwellings.
- 13. Group S occupancies where connecting not more than two floor levels or where connecting not more than three floor levels and the structure is equipped throughout with an approved automatic sprinkler system.
- 14. Group S occupancies where vertical opening protection is not required for open parking garages and ramps.
- 603.4.1.2 Supplemental shaft and floor opening enclosure requirements. Where the work area on any floor exceeds 50% of that floor area, the enclosure requirements of Section 603.4.1 shall apply to vertical openings other than stairways throughout the floor.

Exception: Vertical openings located in tenant spaces that are entirely outside the work area.

603.4.1.3 Supplemental stairway enclosure requirements. Where the work area on any floor exceeds 50% of that floor area, stairways that are part of the means of egress serving the work area shall, at a minimum, be enclosed with smoke tight construction on the highest work area floor and all floors below.

Exception: Where stairway enclosure is not required by the VCC or the International Fire Code.

603.4.2 Smoke compartments. In Group I 2 occupancies where the work area is on a story used for sleeping rooms for more than 30 patients, the story shall be divided into not less than two compartments by smoke barrier walls in accordance with Section 407.5 of the VCC as required for new construction.

603.4.3 Interior finish. The interior finish of walls and ceilings in exits and corridors in any work area shall comply with the requirements of the VCC.

Exception: Existing interior finish materials that do not comply with the interior finish requirements of the VCC shall be permitted to be treated with an approved fire-retardant coating in accordance with the manufacturer's instructions to achieve the required rating.

603.4.3.1 Supplemental interior finish requirements. Where the work area on any floor exceeds 50% of the floor area, Section 603.4.3 shall also apply to the interior finish in exits and corridors serving the work area throughout the floor.

Exception: Interior finish within tenant spaces that are entirely outside the work area.

603.4.4 Guards. The requirements of Sections 603.4.4.1 and 603.4.4.2 shall apply in all work areas.

603.4.4.1 Minimum requirement. Every portion of a floor, such as a balcony or a loading dock, that is more than 30 inches (762 mm) above the floor or grade below and is not provided with guards, or those in which the existing guards are judged to be in danger of collapsing, shall be provided with guards.

603.4.4.2 Design. Where there are no guards or where existing guards must be replaced, the guards shall be designed and installed in accordance with the VCC.

603.4.5 603.4 Fire-resistance ratings. Where approved by the code official, buildings Buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the VCC has been added, and the building is now sprinklered throughout, the required fire-resistance ratings of building elements and materials shall be permitted to meet the requirements of the current building code.

603.5 Fire protection. The requirements of Section 603.5 shall be limited to work areas in which Level 2 alterations are being performed, and where specified they shall apply throughout the floor on which the work areas are located or otherwise beyond the work area.

603.5.1 Corridor ratings. Where an approved automatic sprinkler system is installed throughout the story, the required fire resistance rating for any corridor located on the story shall be permitted to be reduced in accordance with the VCC. In order to be considered for a corridor rating reduction, such system shall provide coverage for the stairway landings serving the floor and the intermediate landings immediately below.

603.5.2 Automatic sprinkler system. Automatic sprinkler systems shall be provided in accordance with the requirements of Sections 603.5.2.1 through 603.5.2.5. Installation requirements shall be in accordance with the VCC.

603.5.2.1 High-rise buildings. In high-rise buildings, work areas that have exits or corridors shared by more than one tenant or that have exits or corridors serving an occupant load greater than 30 shall be provided with automatic sprinkler protection in the entire work area where the work area is located on a floor that has a sufficient sprinkler water supply system from an existing standpipe or a sprinkler riser serving that floor.

603.5.2.1.1 Supplemental automatic sprinkler system requirements. Where the work area on any floor exceeds 50% of that floor area, Section 603.5.2.1 shall apply to the entire floor on which the work area is located.

Exception: Occupied tenant spaces that are entirely outside the work area.

603.5.2.2 Groups A, B, E, F 1, H, I, M, R 1, R 2, R 4, S 1 and S 2. In buildings with occupancies in Groups A, B, E, F-1, H, I, M, R-1, R-2, R-4, S-1 and S-2, work areas that have exits or corridors shared by more than one tenant or that have exits or corridors serving an occupant load greater than 30 shall be provided with automatic sprinkler protection where all of the following conditions occur:

- 1. The work area is required to be provided with automatic sprinkler protection in accordance with the VCC as applicable to new construction; and
- 2. The work area exceeds 50% of the floor area.

Exception: If the building does not have sufficient municipal water supply for design of a fire sprinkler system available to the floor without installation of a new fire pump, work areas shall be protected by an automatic smoke detection system throughout all occupiable spaces other than sleeping units or individual dwelling units that activates the occupant notification system in accordance with Sections 907.4, 907.5 and 907.6 of the VCC.

603.5.2.2.1 Mixed uses. In work areas containing mixed uses, one or more of which requires automatic sprinkler protection in accordance with Section 603.5.2.2, such protection shall not be required throughout the work area provided that the uses requiring such protection are separated from those not requiring protection by fire-resistance rated construction having a minimum two hour rating for Group H and a minimum one hour rating for all other occupancy groups.

603.5.2.3 Windowless stories. Work located in a windowless story, as determined in accordance with the VCC, shall be sprinklered where the work area is required to be sprinklered under the provisions of the VCC for newly constructed buildings and the building has a sufficient municipal water supply without installation of a new fire pump.

603.5.2.4 Other required automatic sprinkler systems. In buildings and areas listed in Table 903.2.11.6 of the VCC,

work areas that have exits or corridors shared by more than one tenant or that have exits or corridors serving an occupant load greater than 30 shall be provided with an automatic sprinkler system under the following conditions:

- 1. The work area is required to be provided with an automatic sprinkler system in accordance with the VCC applicable to new construction; and
- 2. The building has sufficient municipal water supply for design of an automatic sprinkler system available to the floor without installation of a new fire pump.

603.5.2.5 Supervision. Fire sprinkler systems required by this section shall be supervised by one of the following methods:

- 1. Approved central station system in accordance with NFPA 72:
- 2. Approved proprietary system in accordance with NFPA 72:
- 3. Approved remote station system of the jurisdiction in accordance with NFPA 72; or
- 4. When approved by the code official, approved local alarm service that will cause the sounding of an alarm in accordance with NFPA 72.

Exception: Supervision is not required for the following:

- 1. Underground gate valve with roadway boxes.
- 2. Halogenated extinguishing systems.
- 3. Carbon dioxide extinguishing systems.
- 4. Dry chemical and wet chemical extinguishing systems.
- 5. Automatic sprinkler systems installed in accordance with NFPA 13R where a common supply main is used to supply both domestic and automatic sprinkler systems and a separate shutoff valve for the automatic sprinkler system is not provided.

603.5.3 Standpipes. Where the work area includes exits or corridors shared by more than one tenant and is located more than 50 feet (15,240 mm) above or below the lowest level of fire department access, a standpipe system shall be provided. Standpipes shall have an approved fire department connection with hose connections at each floor level above or below the lowest level of fire department access. Standpipe systems shall be installed in accordance with the VCC.

### Exceptions:

1. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gallons per minute (gpm) at 65 pounds per square inch (psi) (946)

L/m at 448KPa) to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gpm at 65 psi (1892 L/m at 448KPa) to the topmost floor in all other buildings. Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet (gpm/psi) (L/m/KPa) requirements of this exception for possible future extension of the standpipe.

2. The interconnection of multiple standpipe risers shall not be required.

603.5.4 Fire alarm and detection. An approved fire alarm system shall be installed in accordance with Sections 603.5.4.1 through 603.5.4.3. Where automatic sprinkler protection is provided in accordance with Section 603.5.2 and is connected to the building fire alarm system, automatic heat detection shall not be required.

An approved automatic fire detection system shall be installed in accordance with the provisions of this code and NFPA 72. Devices, combinations of devices, appliances, and equipment shall be approved. The automatic fire detectors shall be smoke detectors, except that an approved alternative type of detector shall be installed in spaces such as boiler rooms, where products of combustion are present during normal operation in sufficient quantity to actuate a smoke detector.

603.5.4.1 Fire alarm requirements. A fire alarm system shall be installed in accordance with Sections 603.5.4.1.1 through 603.5.4.1.7 and Sections 1103.7 and 1103.8 of the IFC. Existing alarm notification appliances shall be automatically activated throughout the building. Where the building is not equipped with a fire alarm system, alarm notification appliances within the work area shall be provided and automatically activated.

### **Exceptions:**

- 1. Occupancies with an existing, previously approved fire alarm system.
- 2. Where selective notification is permitted, alarm-notification appliances shall be automatically activated in the areas selected.
- 603.5.4.1.1 Group E. Work areas classified as Group E occupancies.
- 603.5.4.1.2 Group I 1. Work areas classified as Group I 1 residential care/assisted living facilities.
- 603.5.4.1.3 Group I-2. Throughout occupancies classified as Group I-2 occupancies.
- 603.5.4.1.4 Group I 3. Work areas classified as Group I 3 occupancies.
- 603.5.4.1.5 Group R 1. Occupancies classified as Group R 1 occupancies.

603.5.4.1.6 Group R-2. Work areas classified as Group R-2 apartment buildings.

603.5.4.1.7 Group R 4. Work areas classified as Group R 4 residential care/assisted living facilities.

603.5.4.2 Supplemental fire alarm system requirements. Where the work area on any floor exceeds 50% of that floor area, Section 603.5.4.1 shall apply throughout the floor.

Exception: Alarm initiating and notification appliances shall not be required to be installed in tenant spaces outside of the work area.

603.5.4.3 Smoke alarms. Individual sleeping units and individual dwelling units in any work area in Group R and I 1 occupancies shall be provided with smoke alarms in accordance with the International Fire Code.

Exception: Interconnection of smoke alarms outside of the work area shall not be required.

603.6 Means of egress. The means of egress shall comply with the requirements of Section 603.6.

#### **Exceptions:**

- 1. Where the work area and the means of egress serving it complies with NFPA 101.
- 2. Means of egress conforming to the requirements of the building code under which the building was constructed shall be considered compliant means of egress.
- 603.6.1 General. The requirements of this section shall be limited to work areas that include exits or corridors shared by more than one tenant within the work area in which Level 2 alterations are being performed, and where specified they shall apply throughout the floor on which the work areas are located or otherwise beyond the work area.
- 603.6.2 Number of exits. The number of exits shall be in accordance with Sections 603.6.2.1 through 603.6.2.3.
- 603.6.2.1 Minimum number. Every story utilized for human occupancy on which there is a work area that includes exits or corridors shared by more than one tenant within the work area shall be provided with the minimum number of exits based on the occupancy and the occupant load in accordance with the VCC. In addition, the exits shall comply with Sections 603.6.2.1.1 and 303.
- 603.6.2.1.1 Single exit buildings. Only one exit is required from buildings and spaces of the following occupancies:
  - 1. In Groups A, B, E, F, M, U, and S occupancies, a single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet (22,860 mm).

- 2. Groups B, F-2, and S-2 occupancies not more than two stories in height that are not greater than 3,500 square feet per floor (326 m²), when the exit access travel distance does not exceed 75 feet (22,860 mm). The minimum fire resistance rating of the exit enclosure and of the opening protection shall be one hour.
- Open parking structures where vehicles are mechanically parked.
- 4. In Group R 4 occupancies, the maximum occupant load excluding staff is 16.
- 5. Groups R 1 and R 2 not more than two stories in height, when there are not more than four dwelling units per floor and the exit access travel distance does not exceed 50 feet (15,240 mm). The minimum fire-resistance rating of the exit enclosure and of the opening protection shall be one hour.
- 6. In multilevel dwelling units in buildings of occupancy Group R 1 or R 2, an exit shall not be required from every level of the dwelling unit provided that one of the following conditions is met:
- 6.1. The travel distance within the dwelling unit does not exceed 75 feet (22.860 mm); or
- 6.2. The building is not more than three stories in height and all third floor space is part of one or more dwelling units located in part on the second floor; and no habitable room within any such dwelling unit shall have a travel distance that exceeds 50 feet (15,240 mm) from the outside of the habitable room entrance door to the inside of the entrance door to the dwelling unit.
- 7. In Groups R 2, H 4, H 5 and I occupancies and in rooming houses and child care centers, a single exit is permitted in a one story building with a maximum occupant load of 10 and the exit access travel distance does not exceed 75 feet (22,860 mm). In dwelling units within Group R 2 buildings, an occupant load of 12 shall be permitted and, in addition, staff of such family day homes shall not be counted for the purposes of establishing occupant loads.
- 8. In buildings of Group R 2 occupancy that are equipped throughout with an automatic fire sprinkler system, a single exit shall be permitted from a basement or story below grade if every dwelling unit on that floor is equipped with an approved window providing a clear opening of at least 5 square feet (0.47 m²) in area, a minimum net clear opening of 24 inches (610 mm) in height and 20 inches (508 mm) in width, and a sill height of not more than 44 inches (1118 mm) above the finished floor.
- 9. In buildings of Group R 2 occupancy of any height with not more than four dwelling units per floor; with a smoke proof enclosure or outside stairway as an exit; and

- with such exit located within 20 feet (6096 mm) of travel to the entrance doors to all dwelling units served thereby.
- 10. In buildings of Group R 3 occupancy equipped throughout with an automatic fire sprinkler system, only one exit shall be required from basements or stories below grade.
- 603.6.2.2 Mezzanines. Mezzanines in the work area and with an occupant load of more than 50 or in which the common path of egress travel distance to an exit or exit access doorway exceeds 75 feet (22,860 mm) shall have access to at least two independent means of egress.
- Exception: Two independent means of egress are not required where the travel distance to an exit does not exceed 100 feet (30,480 mm) and the building is protected throughout with an automatic sprinkler system.
- 603.6.3 Egress doorways. Egress doorways in any work area shall comply with Sections 603.6.3.1 through 603.6.3.5.
- 603.6.3.1 Two egress doorways required. Work areas shall be provided with two egress doorways in accordance with the requirements of Sections 603.6.3.1.1 and 603.6.3.1.2.
- 603.6.3.1.1 Occupant load and travel distance. In any work area, all rooms and spaces having an occupant load greater than 50 or in which the common path of egress travel distance to an exit or exit access doorway exceeds 75 feet (22,860 mm) shall have a minimum of two egress doorways.

### **Exceptions:**

- 1. Storage rooms having a maximum occupant load of
- 2. Where the work area is served by a single exit in accordance with Section 603.6.2.1.1.
- 603.6.3.1.2 Group I 2. In buildings of Group I 2 occupancy, any patient sleeping room or suite of patient rooms greater than 1,000 square feet (93 m<sup>2</sup>) within the work area shall have a minimum of two egress doorways.
- 603.6.3.2 Door swing. In the work area and in the egress path from any work area to the exit discharge, all egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel.
- 603.6.3.2.1 Supplemental requirements for door swing. Where the work area exceeds 50% of the floor area, door swing shall comply with Section 603.6.3.2 throughout the floor.
- Exception: Means of egress within or serving only a tenant space that is entirely outside the work area.
- 603.6.3.3 Door closing. In any work area, all doors opening onto an exit passageway at grade or an exit

stairway shall be self-closing or automatic-closing by listed closing devices.

### **Exceptions:**

- 1. Where exit enclosure is not required by the VCC.
- 2. Means of egress within or serving only a tenant space that is entirely outside the work area.

603.6.3.3.1 Supplemental requirements for door closing. Where the work area exceeds 50% of the floor area, doors shall comply with Section 603.6.3.3 throughout the exit stairway from the work area to, and including, the level of exit discharge.

603.6.3.4 Panic hardware. In any work area, and in the egress path from any work area to the exit discharge, in buildings of Group A assembly occupancies with an occupant load greater than 100, all required exit doors equipped with latching devices shall be equipped with approved panic hardware.

603.6.3.4.1 Supplemental requirements for panic hardware. Where the work area exceeds 50% of the floor area, panic hardware shall comply with Section 603.6.3.4 throughout the floor.

Exception: Means of egress within a tenant space that is entirely outside the work area.

603.6.3.5 Emergency power source in Group I 3. Power operated sliding doors or power operated locks for swinging doors shall be operable by a manual release mechanism at the door. Emergency power shall be provided for the doors and locks in accordance with Section 2702 of the VCC.

### Exceptions:

- 1. Emergency power is not required in facilities with 10 or fewer locks complying with the exception to Section 408.4.1 of the VCC.
- 2. Emergency power is not required where remote mechanical operating releases are provided.

603.6.4 Openings in corridor walls. Openings in corridor walls in any work area shall comply with Sections 603.6.4.1 through 603.6.4.4.

Exception: Openings in corridors where such corridors are not required to be rated in accordance with the VCC.

603.6.4.1 Corridor doors. Corridor doors in the work area shall not be constructed of hollow core wood and shall not contain louvers. All dwelling unit or sleeping unit corridor doors in work areas in buildings of Groups R-1, R-2, and I-1 shall be at least 1 3/8 inch (35 mm) solid core wood or approved equivalent and shall not have any glass panels, other than approved wired glass or other approved glazing material in metal frames. All dwelling unit or sleeping unit

corridor doors in work areas in buildings of Groups R-1, R-2, and I-1 shall be equipped with approved door closers. All replacement doors shall be 1-3/4 inch (44 mm) solid bonded wood core or approved equivalent, unless the existing frame will accommodate only a 1-3/8 inch (35 mm) door.

### **Exceptions:**

- 1. Corridor doors within a dwelling unit or sleeping unit.
- 2. Existing doors meeting the requirements of Guidelines on Fire Ratings of Archaic Materials and Assemblies (VEBC Resource A) for a rating of 15 minutes or more shall be accepted as meeting the provisions of this requirement.
- 3. Existing doors in buildings protected throughout with an approved automatic sprinkler system shall be required only to resist smoke, be reasonably tight fitting, and shall not contain louvers.
- 4. In group homes with a maximum of 15 occupants and that are protected with an approved automatic detection system, closing devices may be omitted.
- 5. Door assemblies having a fire protection rating of at least 20 minutes.

603.6.4.2 Transoms. In all buildings of Group I 1, I 2, R 1 and R 2 occupancies, all transoms in corridor walls in work areas shall be either glazed with 1/4 inch (6.4 mm) wired glass set in metal frames or other glazing assemblies having a fire protection rating as required for the door and permanently secured in the closed position or sealed with materials consistent with the corridor construction.

603.6.4.3 Other corridor openings. In any work area, unless otherwise protected or fire resistant rated in accordance with Section 716 of the VCC, any other sash, grille, or opening in a corridor and any window in a corridor not opening to the outside air shall be sealed with materials consistent with the corridor construction.

603.6.4.3.1 Supplemental requirements for other corridor opening. Where the work area exceeds 50% of the floor area, Section 603.6.4.3 shall be applicable to all corridor windows, grills, sashes, and other openings on the floor.

Exception: Means of egress within or serving only a tenant space that is entirely outside the work area.

603.6.4.4 Supplemental requirements for corridor openings. Where the work area on any floor exceeds 50% of the floor area, the requirements of Sections 603.6.4.1 through 603.6.4.3 shall apply throughout the floor.

603.6.5 Dead end corridors. Dead end corridors in any work area shall not exceed 35 feet (10 670 mm).

#### Exceptions:

- 1. Where dead end corridors of greater length are permitted by the VCC.
- 2. In other than Group A and H occupancies, the maximum length of an existing dead end corridor shall be 50 feet (15,240 mm) in buildings equipped throughout with an automatic fire alarm system installed in accordance with the VCC.
- 3. In other than Group A and H occupancies, the maximum length of an existing dead end corridor shall be 70 feet (21,356 mm) in buildings equipped throughout with an automatic sprinkler system installed in accordance with the VCC.
- 4. In other than Group A and H occupancies, the maximum length of an existing, newly constructed, or extended dead end corridor shall not exceed 50 feet (15,240 mm) on floors equipped with an automatic sprinkler system installed in accordance with the VCC.
- 603.6.6 Means of egress lighting. Means of egress lighting shall be in accordance with this section, as applicable.
- 603.6.6.1 Artificial lighting required. Means of egress in all work areas shall be provided with artificial lighting in accordance with the requirements of the VCC.
- 603.6.6.2 Supplemental requirements for means of egress lighting. Where the work area on any floor exceeds 50% of that floor area, means of egress throughout the floor shall comply with Section 603.6.6.1.
- Exception: Means of egress within or serving only a tenant space that is entirely outside the work area.
- 603.6.7 Exit signs. Exit signs shall be in accordance with this section, as applicable.
- 603.6.7.1 Work areas. Means of egress in all work areas shall be provided with exit signs in accordance with the requirements of the VCC.
- 603.6.7.2 Supplemental requirements for exit signs. Where the work area on any floor exceeds 50% of that floor area, means of egress throughout the floor shall comply with Section 603.6.7.1.
- Exception: Means of egress within a tenant space that is entirely outside the work area.
- 603.6.8 Handrails. The requirements of Sections 603.6.8.1 and 603.6.8.2 shall apply to handrails from the work area floor to, and including, the level of exit discharge.
- 603.6.8.1 Minimum requirement. Every required exit stairway that is part of the means of egress for any work area and that has three or more risers and is not provided with at least one handrail, or in which the existing handrails are judged to be in danger of collapsing, shall be

- provided with handrails for the full length of the stairway on at least one side. All exit stairways with a required egress width of more than 66 inches (1676 mm) shall have handrails on both sides.
- 603.6.8.2 Design. Handrails required in accordance with Section 603.6.8.1 shall be designed and installed in accordance with the provisions of the VCC.
- 603.6.9 Guards. The requirements of Sections 603.6.9.1 and 603.6.9.2 shall apply to guards from the work area floor to, and including, the level of exit discharge but shall be confined to the egress path of any work area.
- 603.6.9.1 Minimum requirement. Every open portion of a stairway, landing, or balcony that is more than 30 inches (762 mm) above the floor or grade below and is not provided with guards, or those portions in which existing guards are judged to be in danger of collapsing, shall be provided with guards.
- 603.6.9.2 Design. Guards required in accordance with Section 603.6.9.1 shall be designed and installed in accordance with the VCC.
- 603.5 In mechanically ventilated spaces, existing mechanical ventilation systems that are altered, reconfigured, or extended shall provide not less than 5 cubic feet per minute (cfm) (0.0024 m³/s) per person of outdoor air and not less than 15 cfm (0.0071 m³/s) of ventilation air per person or not less than the amount of ventilation air determined by the Indoor Air Quality Procedure of ASHRAE 62.
- 603.5.1 Local exhaust. All newly introduced devices, equipment, or operations that produce airborne particulate matter, odors, fumes, vapor, combustion products, gaseous contaminants, pathogenic and allergenic organisms, and microbial contaminants in such quantities as to affect adversely or impair health or cause discomfort to occupants shall be provided with local exhaust.
- 603.6 Plumbing. Where the occupant load of the story is increased by more than 20%, plumbing fixtures for the story shall be provided in quantities specified in the International Plumbing Code based on the increased occupant load.
- 603.7 Structural. Structural elements and systems within buildings undergoing Level 2 alterations shall comply with Sections 603.7.1 through 603.7.5 603.7.6.
- 603.7.1 New structural elements. New structural elements in alterations, including connections and anchorage, shall comply with the VCC.
- 603.7.2 Minimum design loads. The minimum design loads on existing elements of a structure that do not support additional loads as a result of an alteration shall be

the loads applicable at the time the building was constructed.

603.7.3 Existing structural elements carrying gravity loads. Any existing gravity load-carrying structural element for which an alteration causes an increase in design gravity load of more than 5% shall be strengthened, supplemented, replaced or otherwise altered as needed to carry the increased gravity load required by the VCC for new structures. Any existing gravity load-carrying structural element whose gravity load-carrying capacity is decreased as part of the alteration shall be shown to have the capacity to resist the applicable design gravity loads required by the VCC for new structures.

Exception: Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes where the existing building and its alteration comply with the conventional light-frame construction methods of the VCC or the provisions of the International Residential Code.

603.7.3.1 Design live load. Where the alteration does not result in increased design live load, existing gravity load-carrying structural elements shall be permitted to be evaluated and designed for live loads approved prior to the alteration. If the approved live load is less than that required by Section 1607 of the VCC, the area designed for the nonconforming live load shall be posted with placards of approved design indicating the approved live load. Where the alteration does result in increased design live load, the live load required by Section 1607 of the VCC shall be used.

603.7.4 Existing structural elements resisting lateral loads. Except as permitted by Section 603.7.5, where the alteration increases design lateral loads in accordance with Section 1609 or 1613 of the VCC, or where the alteration results in a prohibited structural irregularity as defined in ASCE 7, or where the alteration decreases the capacity of any existing lateral load-carrying structural element, the structure of the altered building or structure shall be shown to meet the requirements of Sections 1609 and 1613 of the VCC. For purposes of this section, compliance with ASCE 41, using a Tier 3 procedure and the two-level performance objective in Table 305.2.2 for the applicable risk category, shall be deemed to meet the requirements of Section 1613 of the VCC.

### Exception:

1. Any existing lateral load-carrying structural element whose demand-capacity ratio with the alteration considered is not more than 10% greater than its demand-capacity ratio with the alteration ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral

loads or forces in accordance with VCC Sections 1609 and 1613. Reduced VCC level seismic forces in accordance with Section 305.2.2 shall be permitted. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of additions and alterations since original construction.

- 2. Buildings of Group R occupancy with no more than five dwelling or sleeping units used solely for residential purposes that are altered based on the conventional light-frame construction methods of the VCC or in compliance with the provisions of the IRC.
- 3. Where such alterations involve only the lowest story of a building and the change of occupancy provisions of Chapter 7 do not apply, only the lateral force-resisting components in and below that story need comply with this section.

603.7.5 Voluntary lateral force-resisting system alterations. Alterations of existing structural elements and additions of new structural elements that are initiated for the purpose of increasing the lateral force-resisting strength or stiffness of an existing structure and that are not required by other sections of this code shall not be required to be designed for forces conforming to the VCC, provided that an engineering analysis is submitted to show that:

- 1. The capacity of existing structural elements required to resist forces is not reduced;
- 2. The lateral loading to existing structural elements is not increased either beyond its capacity or more than 10%;
- 3. New structural elements are detailed and connected to the existing structural elements as required by the VCC;
- 4. New or relocated nonstructural elements are detailed and connected to existing or new structural elements as required by the VCC; and
- 5. Voluntary alterations to lateral force-resisting systems conducted in accordance with Appendix A and the referenced standards of this code shall be permitted.
- 603.7.6 Voluntary seismic improvements. Alterations to existing structural elements or additions of new structural elements that are not otherwise required by this chapter and are initiated for the purpose of improving the performance of the seismic force resisting system of an existing structure or the performance of seismic bracing or anchorage of existing nonstructural elements shall be permitted, provided that an engineering analysis is submitted demonstrating the following:
  - 1. The altered structure and the altered nonstructural elements are no less conforming to the provisions of the

VCC with respect to earthquake design than they were prior to the alteration.

- 2. New structural elements are detailed as required for new construction.
- 3. New or relocated nonstructural elements are detailed and connected to existing or new structural elements as required for new construction.
- 4. The alterations do not create a structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.

603.8 Electrical. Electrical elements and systems within buildings undergoing Level 2 alterations shall comply with Sections 603.8.1 through 603.8.3.

603.8.1 New installations. All newly installed electrical equipment and wiring relating to work done in any work area shall comply with all applicable requirements of NFPA 70 except as provided for in Section 603.8.3.

603.8.2 Existing installations. Existing wiring in all work areas in Groups A 1, A 2, A 5, H, and I occupancies shall be upgraded to meet the materials and methods requirements of Section 602.3.

603.8.3 Residential occupancies. In Groups R 2, R 3, R 4 and R 5 occupancies and buildings regulated by the International Residential Code, the requirements of Sections 603.8.3.1 through 603.8.3.7 shall be applicable only to work areas located within a dwelling unit.

603.8.3.1 Enclosed areas. All enclosed areas, other than closets, kitchens, basements, garages, hallways, laundry areas, utility areas, storage areas, and bathrooms shall have a minimum of two duplex receptacle outlets or one duplex receptacle outlet and one ceiling or wall type lighting outlet.

603.8.3.2 Kitchens. Kitchen areas shall have a minimum of two duplex receptacle outlets.

603.8.3.3 Laundry areas. Laundry areas shall have a minimum of one duplex receptacle outlet located near the laundry equipment and installed on an independent circuit.

603.8.3.4 Ground fault circuit interruption. Newly installed receptacle outlets shall be provided with ground fault circuit interruption as required by NFPA 70.

603.8.3.5 Minimum lighting outlets. At least one lighting outlet shall be provided in every bathroom, hallway, stairway, attached garage, and detached garage with electric power, and to illuminate outdoor entrances and exits.

603.8.3.6 Utility rooms and basements. At least one lighting outlet shall be provided in utility rooms and basements where such spaces are used for storage or contain equipment requiring service.

603.8.3.7 Clearance for equipment. Clearance for electrical service equipment shall be provided in accordance with the NFPA 70.

603.9 Mechanical. All work areas intended for occupancy and all spaces converted to habitable or occupiable space in any work area shall be provided with natural or mechanical ventilation in accordance with the International Mechanical Code.

Exception: Existing mechanical ventilation systems shall comply with the requirements of Section 603.9.1.

603.9.1 Altered existing systems. In mechanically ventilated spaces, existing mechanical ventilation systems that are altered, reconfigured, or extended shall provide not less than 5 cubic feet per minute (cfm) (0.0024 m³/s) per person of outdoor air and not less than 15 cfm (0.0071 m³/s) of ventilation air per person; or not less than the amount of ventilation air determined by the Indoor Air Quality Procedure of ASHRAE 62.

603.9.2 Local exhaust. All newly introduced devices, equipment, or operations that produce airborne particulate matter, odors, fumes, vapor, combustion products, gaseous contaminants, pathogenic and allergenic organisms, and microbial contaminants in such quantities as to affect adversely or impair health or cause discomfort to occupants shall be provided with local exhaust.

603.10 Plumbing. Where the occupant load of the story is increased by more than 20%, plumbing fixtures for the story shall be provided in quantities specified in the International Plumbing Code based on the increased occupant load.

F. Change Section 604 to Level 3 Alterations.

G. Change Section 604.1 and add Sections 604.2 through 604.7, including subsections, to the IEBC to read:

604.1 Scope. Level 3 alterations as described in Section 601.2.3 shall comply with the requirements of this section.

Exception: Buildings in which the alteration is exclusively the result of compliance with the accessibility requirements of Section 404.3 shall be permitted to comply with Section 602.

604.2 Level 1 and Level 2 alterations compliance. In addition to the requirements of this section, work shall comply with the applicable requirements of Sections 602 and 603. The requirements of Sections 603.4, 603.5 and 603.6 shall apply within all work areas whether or not they include exits and corridors shared by more than one tenant and regardless of the occupant load.

Exception: Buildings in which the alteration affecting exits or shared egress access is exclusively the result of compliance with the accessibility requirements of Section 404.3 shall not be required to comply with this section.

604.3 Special use and occupancy. The following special uses and occupancies shall comply with the requirements of Section 603.6 except as specifically required in Sections 604.3.1 and 604.3.2.

604.3.1 High rise buildings. Any building having occupied floors more than 75 feet (22,860 mm) above the lowest level of fire department vehicle access shall comply with the requirements of Sections 604.3.1.1 and 604.3.1.2.

604.3.1.1 Recirculating air or exhaust systems. When a floor is served by a recirculating air or exhaust system with a capacity greater than 15,000 cubic feet per minute (701 m<sup>3</sup>/s), that system shall be equipped with approved smoke and heat detection devices installed in accordance with the International Mechanical Code.

604.3.1.2 Elevators. Where there are elevators for public use, at least one elevator serving the work area shall comply with this section. Existing elevators with a travel distance of 25 feet (7620 mm) or more above or below the main floor or other level of a building and intended to serve the needs of emergency personnel for firefighting or rescue purposes shall be provided with emergency operation in accordance with ASME A17.3. New elevators shall be provided with Phase I emergency recall operation and Phase II emergency in car operation in accordance with ASME A17.1.

604.3.2 Boiler and furnace equipment rooms. Boiler and furnace equipment rooms adjacent to or within Groups I 1, I 2, I 4, R 1, R 2, and R 4 occupancies shall be enclosed by one-hour-fire-resistance-rated construction.

#### Exceptions:

- 1. Steam boiler equipment operating at pressures of 15 pounds per square inch gauge (psig) (103.4 KPa) or less is not required to be enclosed.
- 2. Hot water boilers operating at pressures of 170 psig (1171 KPa) or less are not required to be enclosed.
- 3. Furnace and boiler equipment with 400,000 British thermal units (Btu) (4.22 by 108 J) per hour input rating or less is not required to be enclosed.
- 4. Furnace rooms protected with an automatic sprinkler system are not required to be enclosed.

604.4 Building elements and materials. Building elements and materials shall comply with the requirements of Section 603.6 except as specifically required in Sections 604.4.1 through 604.4.3.

604.4.1 Existing stairways. Existing stairways that are part of the means of egress shall be enclosed in accordance with Section 603.4.1.1, and its exceptions if applicable, from the highest work area floor to, and including, the level of exit discharge and all floors below.

604.4.2 Fire separation in Group R-3. Where the work area is in any attached dwelling unit in Group R-3 or any multiple—single family—dwelling—(townhouse),—walls separating the dwelling units that are not continuous from the foundation to the underside of the roof sheathing shall be constructed to provide a continuous fire separation using construction materials consistent with the existing wall or complying with the requirements for new structures. All work shall be performed on the side of the dwelling unit wall that is part of the work area.

Exception: Where alterations or repairs do not result in the removal of wall or ceiling finishes exposing the structure, walls are not required to be continuous through concealed floor spaces.

604.4.3 Interior finish. Interior finish in exits serving the work area shall comply with Section 603.4.3 between the highest floor on which there is a work area to the floor of exit discharge.

604.5 Fire protection. Fire protection shall comply with the requirements of Section 603.5.2 except as specifically required in Sections 604.5.1 and 604.5.2.

604.5.1 Automatic sprinkler systems. An automatic sprinkler system shall be provided in a work area where required by Section 603.5.1.1 through 604.5.1.3 or Section 603.5.2.

604.5.1.1 High rise buildings. An automatic sprinkler system shall be provided in work areas where the high rise building has a sufficient municipal water supply for the design and installation of an automatic sprinkler system at the site.

604.5.1.2 Rubbish and linen chutes. Rubbish and linen chutes located in the work area shall be provided with automatic sprinkler system protection or an approved automatic fire extinguishing system where protection of the rubbish and linen chute would be required under the provisions of the VCC for new construction.

604.5.1.3 Upholstered furniture or mattresses. Work areas shall be provided with an automatic sprinkler system in accordance with the VCC where any of the following conditions exist:

- 1. A Group F 1 occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet (232 m<sup>2</sup>).
- 2. A Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 m²).

604.5.2 Fire alarm and detection systems. Fire alarm and detection shall be provided throughout the work area in accordance with Section 907 of the VCC as required for new construction.

604.5.2.1 Manual fire alarm systems. Where required by the VCC, a manual fire alarm system shall be provided throughout the work area. Alarm notification appliances shall be provided on such floors and shall be automatically activated as required by the VCC.

#### **Exceptions:**

- 1. Alarm initiating and notification appliances shall not be required to be installed in tenant spaces outside of the work area.
- 2. Visual alarm notification appliances are not required, except where an existing alarm system is upgraded or replaced or where a new fire alarm system is installed.
- 604.5.2.2 Automatic fire detection. Where required by the VCC for new buildings, automatic fire detection systems shall be provided throughout the work area.
- 604.6 Means of egress. The means of egress shall comply with the requirements of Section 603.6 except as specifically required in Sections 604.6.1 and 604.6.2.
- 604.6.1 Means of egress lighting. Means of egress from the highest work area floor to the floor of exit discharge shall be provided with artificial lighting within the exit enclosure in accordance with the requirements of the VCC.
- 604.6.2 Exit signs. Means of egress from the highest work area floor to the floor of exit discharge shall be provided with exit signs in accordance with the requirements of the VCC.
- 604.7 Structural. Structural alterations shall comply with the requirements of Section 603.6 except as specifically required in Sections 604.7.1 and 604.7.2.
- 604.7.1 Substantial structural alteration. Where more than 30% of the total floor and roof areas of the building or structure have been or are proposed to be involved in structural alteration within a five year period, the evaluation and analysis shall demonstrate that the lateral load resisting system of the altered building or structure complies with the International Building Code for wind loading and with reduced International Building Code level seismic force in accordance with Section 305.2.2. The areas to be counted toward the 30% shall be those areas tributary to the vertical load carrying components, such as joists, beams, columns, walls and other structural components that have been or will be removed, added or altered, as well as areas such as mezzanines, penthouses, roof structures and in filled courts and shafts.
- 604.7.2 Limited structural alteration. Where the work does not involve a substantial structural alteration and the building is not assigned to Seismic Design Category F, the existing elements of the lateral load resisting system shall comply with Section 603.7.4.

H. G. Delete Sections <u>604</u>, 605, 606, 607, <u>and</u> 608 <del>and 609</del> of the IEBC in their entirety.

### 13VAC5-63-433.5. Chapter 7 Change of occupancy.

- A. Change Sections 701.1 through 701.2 of the IEBC to read:
  - 701.1 Scope. The provisions of this chapter shall apply where a change of occupancy occurs, except as modified by Section 906 for historic buildings. Compliance with the current VCC for the change of occupancy shall only be required as prescribed in this chapter. Compliance shall be only as necessary to meet the specific provisions of the applicable International Codes and is not intended to require the entire building be brought into compliance.

Exception: Compliance with the provisions of Chapter 14 shall be permitted in lieu of complying with this chapter for a change of occupancy.

- 701.2 Work undertaken in connection with a change of occupancy. Any repairs, alterations, or additions undertaken in connection with a change of occupancy shall conform to the applicable requirements for the work as classified in this code and as modified by this chapter.
- B. Delete Section Sections 701.3 and 701.4 of the IEBC.
- C. Change Section 702 to Special Use and Occupancy.
- D. Change Sections 702.1 and 702.2 of the IEBC to read:
- 702.1 Compliance with the building code. Where a building undergoes a change of occupancy to one of the special use or occupancy categories described in Chapter 4 of the VCC, the building shall comply with all of the requirements of Chapter 4 of the VCC applicable to the special use or occupancy.
- 702.2 Incidental uses. Where a portion of a building undergoes a change of occupancy to one of the incidental uses listed in Table 509 of the VCC, the incidental use shall comply with the applicable requirements of Section 509 of the VCC.
- E. Delete Sections 702.3 through <del>702.6</del> <u>702.6.1</u>, including <u>subsections</u>, of the IEBC.
- F. Change Section 703 to Building Elements and Materials.
- G. Change Section 703.1 of the IEBC and add Section 703.2, including subsections, to the IEBC to read:
  - 703.1 Interior finish. In areas of the building undergoing a change of occupancy classification, the interior finish of walls and ceilings shall comply with the requirements of the VCC for the new occupancy classification.
  - 703.2 Enclosure of vertical openings. When a change of occupancy classification is made to a higher hazard category as shown in Table 705.2, protection of existing

vertical openings shall be in accordance with Sections 703.2.1 through 703.2.3.

703.2.1 Stairways. Interior stairways shall be protected as required by Section 705.1.

703.2.2 Other vertical openings. Interior vertical openings, other than stairways, within the area of the change of occupancy shall be protected as required by the VCC.

## Exceptions:

- 1. Existing one-hour interior shaft enclosures shall be accepted where a higher rating is required.
- 2. Vertical openings, other than stairways, in buildings of other than Group I occupancy and connecting less than six stories shall not be required to be enclosed are permitted if the entire building is provided with an approved automatic sprinkler system.

703.2.3 Shaft openings. All openings into existing vertical shaft enclosures shall be protected by fire assemblies having a fire protection rating of not less than one hour and shall be maintained self-closing or shall be automatic-closing by actuation of a smoke detector. All other openings shall be fire protected in an approved manner. Existing fusible link-type automatic door-closing devices shall be permitted in all shafts except stairways if the fusible link rating does not exceed 135°F (57°C).

- H. Change Section 704 to Fire Protection.
- I. Change Section 704.1 of the IEBC and add Sections 704.2 and 704.3 to the IEBC to read:
  - 704.1 Fire protection systems. Fire protection systems shall be provided in accordance with Sections 704.2 and 704.3.
  - 704.2 Fire sprinkler system. Where a building undergoes a change of occupancy that requires an automatic fire sprinkler system to be provided based on the new occupancy in accordance with Chapter 9 of the VCC, such system shall be provided throughout the area where the change of occupancy occurs.

704.3 Fire alarm and detection system. Where a building undergoes a change of occupancy that requires a fire alarm and detection system to be provided based on the new occupancy in accordance with Chapter 9 of the VCC, such system shall be provided throughout the area where the change of occupancy occurs. Existing alarm notification appliances shall be automatically activated throughout the building. Where the building is not equipped with a fire alarm system, alarm notification appliances shall be provided throughout the area where the change of occupancy occurs in accordance with Section 907 of the VCC as required for new construction.

J. Change Section 705 to Means of Egress.

- K. Change Sections 705.1 through 705.2 705.4, deleting subsections, and add Sections 705.3 and 705.4 to delete Sections 705.5 and 705.6 of the IEBC to read:
  - 705.1 General. Means of egress in buildings undergoing a change of occupancy shall comply with Sections 705.2 through 705.4.
  - 705.2 Means of egress, hazards. Hazard categories in regard to life safety and means of egress shall be in accordance with Table 705.2.

	TABLE 705.2 MEANS OF EGRESS HAZARD CATEGORIES		
RELATIVE HAZARD	OCCUPANCY CLASSIFICATIONS		
1 (Highest Hazard)	Н		
2	I-2, I-3, I-4		
3	A, E, I-1, M, R-1, R-2, R-4		
4	B, F-1, R-3, S-1, R-5		
5 (Lowest Hazard)	F-2, S-2, U		

705.3 Means of egress for change to higher hazard category. When a change of occupancy classification is made to a higher hazard category (lower number) as shown in Table 705.2, the means of egress serving the area of the change of occupancy shall comply with the requirements of Chapter 10 of the VCC, except as modified in Sections 705.3.1 through 705.3.7.

- 1. Existing interior stairways are permitted to be enclosed in accordance with Section 603.4.1.1 from the highest floor where the change of occupancy classification occurs to, and including, the level of exit discharge and all floors below.
- 2. An enclosure shall not be required for openings serving only one adjacent floor and that are not connected with corridors or stairways serving other floors.
- 3. Unenclosed existing stairways need not be enclosed in a continuous vertical shaft if each story is separated from other—stories—by—one hour fire resistance rated construction or approved wired glass set in steel frames and all exit corridors are sprinklered. The openings between the corridor and the occupant space shall have at least one sprinkler head above the openings on the tenant side. The sprinkler system shall be permitted to be supplied from the domestic water supply systems, provided the system is of adequate pressure, capacity, and sizing for the combined domestic and sprinkler requirements.

- 4. Existing corridor walls constructed on both sides of wood lath and plaster in good condition or 1/2 inch thick (12.7 mm) gypsum wallboard shall be permitted. Such walls shall either terminate at the underside of a ceiling of equivalent construction or extend to the underside of the floor or roof next above.
- 5. Existing corridor doorways, transoms, and other corridor openings are permitted to comply with the requirements in Sections 603.6.4.1, 603.6.4.2, and 603.6.4.3 regardless of work areas.
- 6. Existing dead end corridors are permitted to comply with the requirements in Section 603.6.5 regardless of work areas.
- 7. An existing operable window with clear opening area no less than 4 square feet (0.38 m²) and minimum opening height and width of 22 inches (559 mm) and 20 inches (508 mm), respectively, shall be accepted as an emergency escape and rescue opening.
- 8. Regardless of work areas, existing handrails are permitted to comply with the requirements of Section 603.6.8, and existing guards are permitted to comply with the requirements of Section 603.6.10.
- 9. Fire escapes in compliance with Section 303.
- 10. Existing stairways are not required to be altered to meet current tread depth and riser height requirements.
- 705.3.1 Corridor fire-resistance ratings. The following exceptions apply to the fire-resistance rated corridor provisions in the VCC:
  - 1. Existing corridor walls constructed on both sides of wood lath and plaster in good condition or 1/2-inch-thick (12.7 mm) gypsum wallboard are equivalent to a one-hour fire-resistance rating. Such walls shall either terminate at the underside of a ceiling of equivalent construction or extend to the underside of the floor or roof next above.
  - 2. Dwelling unit or sleeping unit corridor doors and transom openings are permitted to comply with any of the following:
  - 2.1 Be at least 13/8-inch (35 mm) solid core wood or approved equivalent and shall not have any glass panels other than approved wired glass or other approved glazing material in metal frames and equipped with approved door closers.
  - 2.2 Meet the requirements of "Guidelines on Fire Ratings of Archaic Materials and Assemblies" (VEBC Resource A) for a rating of 15 minutes or more shall be accepted as meeting the provisions of this requirement.

- 2.3 In buildings protected throughout with an approved automatic sprinkler system, resist smoke, be reasonably tight fitting, and not contain louvers.
- 2.4 In group homes with a maximum of 15 occupants and that are protected with an approved automatic smoke detection system, closing devices may be omitted.
- 2.5 Transoms in corridor walls shall be either glazed with 1/4-inch (6.4 mm) wired glass set in metal frames or other glazing assemblies having a fire protection rating as required for the door and permanently secured in the closed position or sealed with materials consistent with the corridor construction.
- 3. Openings in a corridor and any window in a corridor not opening to the outside air shall be sealed with materials consistent with the corridor construction.
- 705.3.2 Dead-end corridors. Dead-end corridors shall not exceed 35 feet (10670 mm).

- 1. Where dead-end corridors of greater length are permitted by the VCC.
- 2. In other than Groups A and H occupancies, the maximum length of an existing dead-end corridor shall be 50 feet (15240 mm) in buildings equipped throughout with an automatic fire alarm system installed in accordance with the VCC.
- 3. In other than Groups A and H occupancies, the maximum length of an existing dead-end corridor shall be 70 feet (21356 mm) in buildings equipped throughout with an automatic sprinkler system installed in accordance with the VCC.
- 4. In other than Groups A and H occupancies, the maximum length of an existing, newly constructed, or extended dead-end corridor shall not exceed 50 feet (15240 mm) on floors equipped with an automatic sprinkler system installed in accordance with the VCC.
- 705.3.3 Emergency escape and rescue openings. An existing operable window with clear opening area no less than 4 square feet (0.38 m²) and minimum opening height and width of 22 inches (559 mm) and 20 inches (508 mm), respectively, shall be accepted as an emergency escape and rescue opening.
- 705.3.4 Fire escapes. Fire escapes in compliance with Section 303.
- 705.3.5 Interior stairway fire-resistance ratings. Existing interior stairways connecting two or more floors shall be enclosed with approved assemblies having a fire-resistance rating of not less than one hour with approved opening protectives from the highest floor where the change of

occupancy classification occurs to, and including, the level of exit discharge and all floors below.

- 1. Where interior stairway enclosure is not required by the VCC.
- 2. Unenclosed existing stairways need not be enclosed in a continuous vertical shaft if each story is separated from other stories by one-hour fire-resistance-rated construction or approved wired glass set in steel frames and all exit corridors are sprinklered. The openings between the corridor and the occupant space shall have at least one sprinkler head above the openings on the tenant side. The sprinkler system shall be permitted to be supplied from the domestic water supply systems, provided the system is of adequate pressure, capacity, and sizing for the combined domestic and sprinkler requirements.
- 3. In Group A occupancies, a minimum 30-minute enclosure shall be permitted to protect all interior stairways not exceeding three stories.
- 4. In Group B occupancies, a minimum 30-minute enclosure shall not be permitted to protect all interior stairways not exceeding three stories. This enclosure shall not be required in the following locations:
- 4.1 Buildings not exceeding 3,000 square feet (279 m<sup>2</sup>) per floor.
- 4.2 Buildings protected throughout by an approved automatic fire sprinkler system.
- 5. In Group E occupancies, the enclosure shall not be required for interior stairways not exceeding three stories when the building is protected throughout by an approved automatic fire sprinkler system.
- 6. In Group F occupancies, the enclosure shall not be required in the following locations:
- 6.1 Interior stairways not exceeding three stories.
- 6.2 Special purpose occupancies where necessary for manufacturing operations and direct access is provided to at least one protected stairway.
- 6.3 Buildings protected throughout by an approved automatic sprinkler system.
- 7. In Group H occupancies, the enclosure shall not be required for interior stairways not exceeding three stories where stairways are necessary for manufacturing operations and every floor level has direct access to at least two remote enclosed stairways or other approved exits.
- 8. In Group M occupancies, a minimum 30-minute enclosure shall be permitted to protect all interior

- stairways not exceeding three stories. This enclosure shall not be required in the following locations:
- 8.1 Stairways connecting only two floor levels.
- 8.2 Occupancies protected throughout by an approved automatic sprinkler system.
- 9. In Group R-1 occupancies, the enclosure shall not be required for interior stairways not exceeding three stories in the following locations:
- 9.1 Buildings protected throughout by an approved automatic sprinkler system.
- 9.2 Buildings with fewer than 25 dwelling units or sleeping units where every sleeping room above the second floor is provided with direct access to a fire escape or other approved second exit by means of an approved exterior door or window having a sill height of not greater than 44 inches (1118 mm) and where:
- 9.2.1 Any exit access corridor exceeding 8 feet (2438 mm) in length that serves two means of egress, one of which is an unprotected vertical opening, shall have at least one of the means of egress separated from the vertical opening by a one-hour fire barrier; and
- 9.2.2 The building is protected throughout by an automatic fire alarm system, installed and supervised in accordance with the VCC.
- 10. In Group R-2 occupancies, a minimum 30-minute enclosure shall be permitted to protect interior stairways not exceeding three stories. This enclosure shall not be required in the following locations:
- 10.1 Interior stairways not exceeding two stories with not more than four dwelling units per floor.
- <u>10.2 Buildings protected throughout by an approved</u> automatic sprinkler system.
- 10.3 Buildings with not more than four dwelling units per floor where every sleeping room above the second floor is provided with direct access to a fire escape or other approved second exit by means of an approved exterior door or window having a sill height of not greater than 44 inches (1118 mm), and the building is protected throughout by an automatic fire alarm system complying with the VCC.
- 11. Stairway enclosure is not required in one-family and two-family dwellings.
- 12. Group S occupancies where connecting not more than two floor levels or where connecting not more than three floor levels and the structure is equipped throughout with an approved automatic sprinkler system.
- 13. Group S occupancies where stairway protection is not required for open parking garages and ramps.

705.3.6 Stairway geometry. Existing stairways are not required to be altered to meet tread depth and riser height requirements of the VCC.

705.3.7 Stairway handrails. Existing stairways are required to have a VCC compliant handrail on one side up to a required egress width of 66 inches (1676 mm) and both sides when the required egress width exceeds 66 inches (1676 mm).

705.4 Means of egress for change of occupancy to equal or lower hazard category or without a change in classification. When a change of occupancy classification is made to an equal or lesser hazard category (higher number) as shown in Table 705.2 or a change of occupancy without a change of classification is made, the means of egress shall be deemed acceptable provided the means of egress serving the area of the change of occupancy meets the egress capacity and occupant load based means of egress provisions in Chapter 10 of the VCC for the new occupancy.

- L. Change Section 706 to Heights and Areas.
- M. Change Sections 706.1 through 706.5 706.3, including subsections, and add Sections 706.4 and 706.5 of the IEBC to read:
  - 706.1 General. Heights and areas of buildings and structures undergoing a change of occupancy classification shall comply with this Section.

706.2 Heights and areas, hazards. Hazard categories in regard to height and area shall be in accordance with Table 706.2.

TABLE 706.2 HEIGHTS AND AREAS HAZARD CATEGORIES	
RELATIVE HAZARD	OCCUPANCY CLASSIFICATIONS
1 (Highest Hazard)	Н
2	A-1, A-2, A-3, A-4, I, R-1, R-2, R-4
3	E, F-1, S-1, M
4 (Lowest Hazard)	B, F-2, S-2, A-5, R-3, R-5, U

706.3 Height and area for change to higher hazard category. When a change of occupancy classification is made to a higher hazard category as shown in Table 706.2, heights and areas of buildings and structures shall comply with the requirements of Chapter 5 of the VCC for the new occupancy classification.

Exception: For high-rise buildings constructed in compliance with a previously issued permit, the type of construction reduction specified in Section 403.2.1 of the

VCC is permitted. This shall include the reduction for columns. The high-rise building is required to be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the VCC.

706.3.1 Fire wall alternative. In other than Groups H, F-1 and S-1, fire barriers and horizontal assemblies constructed in accordance with Sections 707 and 711, respectively, of the VCC shall be permitted to be used in lieu of fire walls to subdivide the building into separate buildings for the purpose of complying with the area limitations required for the new occupancy where all of the following conditions are met:

- 1. The buildings are protected throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the International Building Code.
- 2. The maximum allowable area between fire barriers, horizontal assemblies, or any combination thereof shall not exceed the maximum allowable area determined in accordance with Chapter 5 of the VCC without an increase allowed for an automatic sprinkler system in accordance with Section 506 of the VCC.
- 3. The fire-resistance rating of the fire barriers and horizontal assemblies shall be not less than that specified for fire walls in Table 706.4 of the VCC.

Exception: Where horizontal assemblies are used to limit the maximum allowable area, the required fire-resistance rating of the horizontal assemblies shall be permitted to be reduced by one hour provided the height and number of stories increases allowed for an automatic sprinkler system by Section 504 of the VCC are not used for the buildings.

706.4 Height and area for change to equal or lesser hazard category. When a change of occupancy classification is made to an equal or lesser hazard category as shown in Table 706.2, the height and area of the existing building shall be deemed acceptable.

706.5 Fire barriers. When a change of occupancy classification is made to a higher hazard category as shown in Table 706.2, fire barriers in separated mixed use buildings shall comply with the fire-resistance requirements of the VCC.

Exception: Where the fire barriers are required to have a one-hour-fire-resistance rating, existing wood lath and plaster in good condition or existing 1/2-inch-thick (12.7 mm) gypsum wallboard shall be permitted.

- N. Delete Section 706.6 of the IEBC Change Section 707 to Exterior Wall Fire-Resistance Ratings.
- O. Change Section 707 to Exterior Wall Fire Resistance Ratings Section 707.1 and add Sections 707.2 through 707.4 to the IEBC to read:

# P. Change Sections 707.1 through 707.3, deleting subsections, of the IEBC and add Section 707.4 to the IEBC to read:

707.1 Exterior wall fire-resistance ratings, hazards. Hazard categories in regard to fire-resistance ratings of exterior walls shall be in accordance with Table 707.1.

TABLE 707.1 EXPOSURE OF EXTERIOR WALLS HAZARD CATEGORIES	
RELATIVE HAZARD	OCCUPANCY CLASSIFICATIONS
1 (Highest Hazard)	Н
2	F-1, M, S-1
3	A, B, E, I, R
4 (Lowest Hazard)	F-2, S-2, U

707.2 Exterior wall rating for change of occupancy classification to a higher hazard category. When a change of occupancy classification is made to a higher hazard category as shown in Table 707.1, exterior walls shall have fire resistance and exterior opening protectives as required by the VCC.

Exception: A two-hour-fire-resistance rating shall be allowed where the building does not exceed three stories in height and is classified as one of the following groups: A-2 and A-3 with an occupant load of less than 300, B, F, M, or S.

707.3 Exterior wall rating for change of occupancy classification to an equal or lesser hazard category. When a change of occupancy classification is made to an equal or lesser hazard category as shown in Table 707.1, existing exterior walls, including openings, shall be accepted.

707.4 Opening protectives. Openings in exterior walls shall be protected as required by the VCC. Where openings in the exterior walls are required to be protected because of their distance from the lot line, the sum of the area of such openings shall not exceed 50% of the total area of the wall in each story.

- 1. Where the VCC permits openings in excess of 50%.
- 2. Protected openings shall not be required in buildings of Group R occupancy that do not exceed three stories in height and that are located not less than 3 feet (914 mm) from the lot line.
- 3. Where exterior opening protectives are required, an automatic sprinkler system throughout may be substituted for opening protection.

- 4. Exterior opening protectives are not required when the change of occupancy group is to an equal or lower hazard classification in accordance with Table 707.1.
- P. Add Section 708 Electrical and Lighting.
- Q. Change Section 708 to Electrical and Lighting.
- R. Change Section 708.1 of the IEBC and add Sections 708.2 Q. Add Sections 708.1 through 708.4 to the IEBC to read:
  - 708.1 Special occupancies. Where a building undergoes a change of occupancy to one of the following special occupancies as described in NFPA 70, the electrical wiring and equipment of the building that contains the proposed occupancy shall comply with the applicable requirements of NFPA 70:
    - 1. Hazardous locations.
    - 2. Commercial garages, repair, and storage.
    - 3. Aircraft hangars.
    - 4. Gasoline dispensing and service stations.
    - 5. Bulk storage plants.
    - 6. Spray application, dipping, and coating processes.
    - 7. Health care facilities.
    - 8. Places of assembly.
    - 9. Theaters, audience areas of motion picture and television studios, and similar locations.
    - 10. Motion picture and television studios and similar locations.
    - 11. Motion picture projectors.
    - 12. Agricultural buildings.
  - 708.2 Service upgrade. When a new occupancy is required to have a higher electrical load demand per NFPA 70 and the service cannot accommodate the increased demand, the service shall be upgraded to meet the requirements of NFPA 70 for the new occupancy.
  - 708.3 Number of electrical outlets. Where a building undergoes a change of occupancy, the number of electrical outlets shall comply with NFPA 70 for the new occupancy.
  - 708.4 Lighting. Lighting shall comply with the requirements of the VCC for the new occupancy.
- S. R. Add Section 709 Mechanical and Ventilation.
- T. S. Add Section 709.1 to the IEBC to read:
- 709.1 Mechanical and ventilation requirements. Where a building undergoes a change of occupancy such that the new occupancy is subject to different kitchen exhaust requirements or to increased ventilation requirements in

accordance with the International Mechanical Code, the new occupancy shall comply with the respective International Mechanical Code provisions.

- U. T. Add Section 710 Plumbing.
- $\forall$   $\underline{U}$ . Add Sections 710.1 through 710.3 to the IEBC to read:
  - 710.1 Increased demand. Where a building or portion thereof undergoes a change of occupancy, such that the new occupancy is subject to increased or different plumbing fixture requirements or to increased water supply requirements in accordance with the International Plumbing Code, the new occupancy shall comply with the respective International Plumbing Code provisions.

Exception: In other than Group R or I occupancies or child care facilities classified as Group E, where the occupant load is increased by 20% or less in the area where the change of occupancy occurs, additional plumbing fixtures required based on the increased occupant load in quantities specified in the International Plumbing Code are not required.

- 710.2 Interceptor required. If the new occupancy will produce grease or oil-laden wastes, interceptors shall be provided as required in the International Plumbing Code.
- 710.3 Chemical wastes. If the new occupancy will produce chemical wastes, the following shall apply:
  - 1. If the existing piping is not compatible with the chemical waste, the waste shall be neutralized prior to entering the drainage system, or the piping shall be changed to a compatible material.
  - 2. No chemical waste shall discharge to a public sewer system without the approval of the sewage authority.
- W. V. Add Section 711 Structural.
- X. W. Add Sections 711.1 through 711.3, including subsections, to the IEBC to read:
  - 711.1 Gravity loads. Buildings subject to a change of occupancy where such change in the nature of occupancy results in higher uniform or concentrated loads based on Table 1607.1 of the VCC shall comply with the gravity load provisions of the VCC.

Exception: Structural elements whose stress is not increased by more than 5%.

711.2 Snow and wind loads. Buildings and structures subject to a change of occupancy where such change in the nature of occupancy results in higher wind or snow risk categories based on Table 1604.5 of the VCC shall be analyzed and shall comply with the applicable wind or snow load provisions of the VCC.

Exception: Where the new occupancy with a higher risk category is less than or equal to 10% of the total building floor area. The cumulative effect of the area of occupancy changes shall be considered for the purposes of this exception.

- 711.3 Seismic loads. Existing buildings with a change of occupancy shall comply with the seismic provisions of Sections 711.3.1 and 711.3.2.
- 711.3.1 Compliance with VCC-level seismic forces. Where a building is subject to a change of occupancy that results in the building being assigned to a higher risk category based on Table 1604.5 of the VCC, the building shall comply with the requirements for VCC-level seismic forces as specified in Section 305.2.1 for the new risk category.

- 1. Specific detailing provisions required for a new structure are not required to be met where it can be shown that an equivalent level of performance and seismic safety is obtained for the applicable risk category based on the provision for reduced VCC-level seismic forces as specified in Section 305.2.2.
- 2. Where the area of the new occupancy with a higher hazard category is less than or equal to 10% of the total building floor area and the new occupancy is not classified as Risk Category IV. For the purposes of this exception, buildings occupied by two or more occupancies not included in the same risk category, shall be subject to the provisions of Section 1604.5.1 of the VCC. The cumulative effect of the area of occupancy changes shall be considered for the purposes of this exception.
- 3. Unreinforced masonry bearing wall buildings in Risk Category III when assigned to Seismic Design Category A or B shall be allowed to be strengthened to meet the requirements of Appendix Chapter A1 of this code Guidelines for the Seismic Retrofit of Existing Buildings (GSREB).
- 4. Specific seismic detailing requirements of Section 1613 of the VCC for a new structure shall not be required to be met where the seismic performance is shown to be equivalent to that of a new structure. A demonstration of equivalence shall consider the regularity, overstrength, redundancy, and ductility of the structure.
- 5. When a change of occupancy results in a structure being reclassified from Risk Category I or II to Risk Category III and the structure is located where the seismic coefficient, SDS, is less than 0.33, compliance with the seismic requirements of Section 1613 of the VCC is not required.

- 711.3.2 Access to Risk Category IV. Where a change of occupancy is such that compliance with Section 711.3.1 is required and the building is assigned to Risk Category IV, the operational access to the building shall not be through an adjacent structure, unless that structure conforms to the requirements for Risk Category IV structures. Where operational access is less than 10 feet (3048 mm) from either an interior lot line or from another structure, access protection from potential falling debris shall be provided by the owner of the Risk Category IV structure.
- Y. X. Add Section 712 Accessibility.
- Z. Y. Add Section 712.1 to the IEBC to read:
- 712.1 General. Existing buildings that undergo a change of occupancy classification shall comply with Section 402.

## 13VAC5-63-434. Chapter 8 Additions.

- A. Change Sections 801.1 through 801.3 of the IEBC to read:
  - 801.1 Scope. Additions to any building or structure shall comply with the requirements of the VCC for new construction without requiring the existing building or structure to comply with any requirements of those codes or of these provisions, except as required by this chapter. Where an addition impacts the existing building or structure, that portion shall comply with this code. Where a fire wall that complies with Section 706 of the VCC is provided between the addition and the existing building, the addition shall be considered a separate building.
  - 801.2 Creation or extension of nonconformity. An addition shall not create or extend any nonconformity in the existing building to which the addition is being made with regard to accessibility, structural strength, fire safety, means of egress, or the capacity of mechanical, plumbing, or electrical systems. Alterations to the existing building or structure shall be made so that the existing building or structure, together with the addition, are no less conforming to the provisions of the VCC than the existing building or structure was prior to the addition.
  - 801.3 Other work. Any repair or alteration work within an existing building to which an addition is being made shall comply with the applicable requirements for the work as classified in this code.
- B. Change Section 802 to Heights and Areas.
- C. Change <u>Sections</u> <u>Sections</u> 802.1 <u>through 802.3</u>, <u>deleting subsections</u>, of the IEBC to read:
  - 802.1 Height limitations. No addition shall increase the height of an existing building beyond that permitted under the applicable provisions of Chapter 5 of the VCC for new buildings.

#### D. Add Sections 802.2 and 802.3 to the IEBC to read:

802.2 Area limitations. No addition shall increase the area of an existing building beyond that permitted under the applicable provisions of Chapter 5 of the VCC for new buildings unless fire separation as required by the VCC is provided.

Exception: Exceptions: The following shall be permitted beyond that permitted by the VCC.

- <u>1.</u> In-filling of floor openings <del>and nonoccupiable</del> <del>appendages</del> such as elevator and exit stairway shafts <del>shall be permitted beyond that permitted by the VCC</del>.
- 2. The addition of nonoccupiable spaces such as elevators, stairs, and vestibules.
- 802.3 Fire protection systems. Existing fire areas increased by the addition shall comply with Chapter 9 of the VCC.
- <u>D. Delete Sections 802.4 through 802.6, including subsections, of the IEBC.</u>
- E. Change Section 803 to Structural.
- F. Change Sections 803.1 through 803.5 803.4, including subsections, and delete Sections 803.2.2, 803.2.3, 803.4.1, 803.5.1 and 803.5.2 803.1.1, 803.2.1.1, 803.2.2, 803.2.2.1, 803.2.3, 803.2.4, and 803.4.1 through 803.4.3, including subsections, of the IEBC.
  - 803.1 Compliance with the VCC. Additions to existing buildings or structures are new construction and shall comply with the VCC.
  - 803.2 Existing structural elements carrying gravity load. Any existing gravity load-carrying structural element for which an addition and its related alterations cause an increase in design gravity load of more than 5% 5.0% shall be strengthened, supplemented, replaced or otherwise altered as needed to carry the increased gravity load required by the VCC for new structures. Any existing gravity load-carrying structural element whose gravity load-carrying capacity is decreased shall be considered an altered element subject to the requirements of Section 603.7.3. Any existing element that will form part of the lateral load path for any part of the addition shall be considered an existing lateral load-carrying structural element subject to the requirements of Section 803.3.

Exception: Buildings of Group R occupancy with no more than five dwelling units or sleeping units used solely for residential purposes where the existing building and the addition comply with the conventional light-frame construction methods of the VCC or the provisions of the International Residential Code.

803.2.1 Design live load. Where the addition does not result in increased design live load, existing gravity load-carrying structural elements shall be permitted to be

evaluated and designed for live loads approved prior to the addition. If the approved live load is less than that required by Section 1607 of the VCC, the area designed for the nonconforming live load shall be posted with placards of approved design indicating the approved live load. Where the addition does result in increased design live load, the live load required by Section 1607 of the VCC shall be used.

803.3 Existing structural elements carrying lateral load. Where the addition is structurally independent of the existing structure, existing lateral load-carrying structural elements shall be permitted to remain unaltered. Where the addition is not structurally independent of the existing structure, the existing structure and its addition acting together as a single structure shall be shown to meet the requirements of Sections 1609 and 1613 of the VCC. For purposes of this section, compliance with ASCE 41, using a Tier 3 procedure and the two-level performance objective in Table 305.2.1 for the applicable risk category, shall be deemed to meet the requirements of Section 1613.

#### **Exceptions:**

- 1. Any existing lateral load-carrying structural element whose demand-capacity ratio with the addition considered is not more than 10% greater than its demand-capacity ratio with the addition ignored shall be permitted to remain unaltered. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of additions and alterations since original construction. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations involving VCC-level seismic forces in accordance with Section 305.2.1.
- 2. Buildings of Group R occupancy with no more than five dwelling or sleeping units used solely for residential purposes where the existing building and the addition comply with the conventional light-frame construction methods of the VCC or the provisions of the International Residential Code.
- 803.4 Voluntary addition of structural elements to improve the lateral force-resisting system. Voluntary addition of structural elements to improve the lateral force-resisting system of an existing building shall comply with Section 603.7.5.

## G. Add Section 803.5 to the IEBC to read:

803.5 Snow drift loads. Any structural element of an existing building subjected to additional loads from the effects of snow drift as a result of an addition shall comply with the VCC.

#### Exceptions:

- 1. Structural elements whose stress is not increased by more than 5% 5.0%.
- 2. Buildings of Group R occupancy with no more than five dwelling units or sleeping units used solely for residential purposes where the existing building and the addition comply with the conventional light-frame construction methods of the VCC or the provisions of the International Residential Code.

#### G. Delete Section 803.6 from the IEBC.

- H. Change Section 804 to Flood Hazard Areas.
- I. Change Section 804.1, and delete Sections 804.2, 804.3, and 804.4, including subsections, of the IEBC to read:
  - 804.1 Flood hazard areas. Additions and foundations in flood hazard areas shall comply with the following requirements:
    - 1. For horizontal additions that are structurally interconnected to the existing building:
  - 1.1. If the addition and all other proposed work, when combined, constitute substantial improvement, the existing building and the addition shall comply with Section 1612 of the International Building Code or Section R322 of the International Residential Code, as applicable.
  - 1.2. If the addition constitutes substantial improvement, the existing building and the addition shall comply with Section 1612 of the International Building Code or Section R322 of the International Residential Code, as applicable.
  - 2. For horizontal additions that are not structurally interconnected to the existing building:
  - 2.1. The addition shall comply with Section 1612 of the International Building Code or Section R322 of the International Residential Code, as applicable.
  - 2.2. If the addition and all other proposed work when combined constitute substantial improvement, the existing building and the addition shall comply with Section 1612 of the International Building Code or Section R322 of the International Residential Code, as applicable.
  - 3. For vertical additions and all other proposed work that when combined constitute substantial improvement, the existing building shall comply with Section 1612 of the International Building Code or Section R322 of the International Residential Code, as applicable.
  - 4. For a raised or extended foundation, if the foundation work and all other proposed work when combined constitute substantial improvement, the existing building

shall comply with Section 1612 of the International Building Code or Section R322 of the International Residential Code, as applicable.

- 5. For a new foundation or replacement foundation, the foundation shall comply with Section 1612 of the International Building Code or Section R322 of the International Residential Code, as applicable.
- J. Delete Sections 805, 806, 807, 808, 809, <u>and</u> 810<del>, and 811, in their entirety, from <u>of</u> the IEBC.</del>

#### 13VAC5-63-434.5. Chapter 9 Historic buildings.

- A. Change Sections 901.1 and 901.2 of the IEBC to read:
- 901.1 Scope. It is the intent of this chapter to provide means for the preservation of historic buildings. The provisions of this code relating to construction involving historic buildings shall not be mandatory unless such a construction constitutes a life safety hazard. Accessibility shall be provided in accordance with Section 405.
- 901.2 Report. The code official shall be permitted to require that a historic building undergoing repair, alteration or change of occupancy be investigated and evaluated by an RDP or other qualified person or agency as a condition of determining compliance with this code.
- B. Add Section 901.3 to the IEBC to read:
- 901.3 Special occupancy exceptions. When a building in Group R-3 is also used for Group A, B, or M purposes such as museum tours, exhibits, and other public assembly activities, or for museums less than 3,000 square feet (279 m²), the code official may determine that the occupancy is Group B when life safety conditions can be demonstrated in accordance with Section 901.2. Adequate means of egress in such buildings, which may include a means of maintaining doors in an open position to permit egress, a limit on building occupancy to an occupant load permitted by the means of egress capacity, a limit on occupancy of certain areas or floors, or supervision by a person knowledgeable in the emergency exiting procedures, shall be provided.
- C. Change Section 902 to Flood hazard areas.
- D. Change Section 902.1 of the IEBC to read:
- 902.1 Flood hazard areas. In flood hazard areas, if all proposed work, including repairs, work required because of a change of occupancy, and alterations, constitutes substantial improvement, then the existing building shall comply with Section 1612 of the International Building Code or Section R322 of the International Residential Code, as applicable.

Exception: If an historic building will continue to be an historic building after the proposed work is completed, then the proposed work is not considered a substantial

improvement. For the purposes of this exception, an historic building is:

- 1. Listed or preliminarily determined to be eligible for listing in the National Register of Historic Places;
- 2. Determined by the Secretary of the U.S. Department of Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined to qualify as an historic district; or
- 3. Designated as historic under a state or local historic preservation program that is approved by the Department of Interior.
- E. Delete Section Sections 902.1.1, 902.1.2, and 902.2 of the IEBC.
- F. Change Section 903 to Repairs.
- G. Change Sections 903.1 through 903.3, including deleting subsections, of the IEBC to read:
  - 903.1 General. Repairs to any portion of an historic building or structure shall be permitted with original or like materials and original methods of construction, subject to the provisions of this chapter. Hazardous materials, such as asbestos and lead-based paint, shall not be used where the code for new construction would not permit their use in buildings of similar occupancy, purpose and location.
  - 903.2 Moved buildings. Foundations of moved historic buildings and structures shall comply with the VCC. Moved historic buildings shall otherwise be considered an historic building for the purposes of this code. Moved historic buildings and structures shall be sited so that exterior wall and opening requirements comply with the VCC or with the compliance alternatives of this code.
  - 903.3 Replacement. Replacement of existing or missing features using original materials shall be permitted. Partial replacement for repairs that match the original in configuration, height, and size shall be permitted. Replacement glazing in hazardous locations shall comply with the safety glazing requirements of Chapter 24 of the VCC.

Exception: Glass block walls, louvered windows, and jalousies repaired with like materials.

- H. Change Section 904 to Fire Safety.
- I. Change Sections 904.1 and 904.2, deleting subsections, of the IEBC to read:
  - 904.1 Scope. Except as provided in Section 901, historic buildings undergoing alterations, changes of occupancy, or that are moved shall comply with this section.
  - 904.2 General. Every historic building that does not conform to the construction requirements specified in this code for the occupancy or use and that constitutes a distinct

fire hazard as defined in this code shall be provided with an approved automatic fire extinguishing system as determined appropriate by the code official. However, an automatic fire extinguishing system shall not be used to substitute for, or act as an alternative to, the required number of exits from any facility.

J. Add Sections 904.3 through 904.12, including subsections, to the IEBC to read:

904.3 Means of egress. Existing door openings and corridor and stairway widths less than those specified elsewhere in this code shall be permitted, provided there is sufficient width and height for a person to pass through the opening or traverse the means of egress. The front or main exit doors need not swing in the direction of the path of exit travel, provided that other approved means of egress having sufficient capacity to serve the total occupant load are provided.

904.4 Transoms. In fully sprinklered buildings of Group R-1, R-2 or R-3 occupancy, existing transoms in corridors and other fire resistance rated walls may be maintained if fixed in the closed position. A sprinkler shall be installed on each side of the transom.

904.5 Interior finishes. The existing finishes of walls and ceilings shall be accepted when it is demonstrated that they are the historic finishes.

904.6 Stairway enclosure. In buildings of three stories or less, exit enclosure construction shall limit the spread of smoke by the use of tight fitting doors and solid elements. Such elements are not required to have a fire resistance rating.

904.7 One hour fire resistant assemblies. Where one hour fire resistance rated construction is required by these provisions, it need not be provided, regardless of construction or occupancy, where the existing wall and ceiling finish is wood or metal lath and plaster.

904.8 Glazing in fire resistance rated systems. Historic glazing materials are permitted in interior walls required to have a one hour fire resistance rating where the opening is provided with approved smoke seals and the area affected is provided with an automatic sprinkler system.

904.9 Stairway railings. Grand stairways shall be accepted without complying with the handrail and guard requirements. Existing handrails and guards at all stairways shall be permitted to remain, provided they are not structurally dangerous.

904.10 Guards Guards shall comply with Sections 904.10.1 and 904.10.2.

904.10.1 Height. Existing guards shall comply with the requirements of Section 501.2.

904.10.2 Guard openings. The spacing between existing intermediate railings or openings in existing ornamental patterns shall be accepted. Missing elements or members of a guard may be replaced in a manner that will preserve the historic appearance of the building or structure.

904.11 Exit signs. Where exit sign or egress path marking location would damage the historic character of the building, alternative exit signs are permitted with approval of the code official. Alternative signs shall identify the exits and egress path.

904.12 Automatic fire extinguishing systems. Every historical building that cannot be made to conform to the construction requirements specified in the VCC for the occupancy or use and that constitutes a distinct fire hazard shall be deemed to be in compliance if provided with an approved automatic fire extinguishing system.

Exception: When the code official approves an alternative life safety system.

K. H. Delete Section 904 in its entirety.

I. Change Section 905 to Alterations.

L. J. Change Section Sections 905.1 to and 905.2 of the IEBC to read:

905.1 General. The provisions of Chapter 6, as applicable, shall apply to facilities designated as historic structures that undergo alterations, unless technically infeasible.

905.2 Exit signs and egress path markings. Where new exit signs or egress path markings would damage the historic character of the building or structure, alternative exit signs and egress path markings are permitted with approval of the code official. Alternative signs and egress path markings shall identify the exits and egress path.

M. K. Delete Sections 905.2 and Section 905.3 of the IEBC.

N. L. Change Section 906 to Change of Occupancy.

O. M. Change Sections 906.1 and 906.2 through 906.7 of the IEBC to read:

906.1 General. Historic buildings undergoing a change of occupancy shall comply with the applicable provisions of Chapter 7, except as specifically permitted in this chapter. When Chapter 7 requires compliance with specific requirements of Chapter 6 and when those requirements are subject to the exceptions elsewhere in Section 903 this code, the same exceptions shall apply to this section.

906.2 Building area. The When a change of occupancy classification is made to a higher hazard category as indicated in Table 706.2, the allowable floor area for historic buildings undergoing a change of occupancy shall be permitted to exceed by 20% the allowable areas specified in Chapter 5 of the VCC.

#### P. Add Sections 906.3 through 906.14 to the IEBC to read:

906.3 Location on property. Historic structures undergoing a change of use to a higher hazard category in accordance with Section 707.1 may use alternative methods to comply with the fire-resistance and exterior opening protective requirements. Such alternatives shall comply with Section 901.2.

906.4 Occupancy separation. Required occupancy separations of one hour may be omitted when the building is provided with an approved automatic sprinkler system throughout.

906.5 Roof covering. Regardless of occupancy or use group, Roof covering materials not less than Class C, when tested in accordance with ASTM E 108 or UL 790, shall be permitted where a fire retardant roof covering is required.

906.5 Automatic fire-extinguishing systems. Every historical building or portion thereof, that cannot be made to conform to the construction requirements specified in Chapter 7 or this chapter for the occupancy or use and such change constitutes a fire hazard, shall be deemed to be in compliance if those spaces undergoing a change of occupancy are provided with an approved automatic fire-extinguishing system.

Exception: When the building official approves an alternative life-safety system.

906.6 Means of egress. Existing door openings and corridor and stairway widths less than those that would be acceptable for nonhistoric buildings under these provisions required elsewhere in this code shall be permitted, provided there is sufficient width and height for a person to pass through the opening or traverse the exit and that the capacity of the exit system is adequate for the occupant load or where other operational controls to limit occupancy are approved by the code official.

906.7 Door swing. Existing front doors need not swing in the direction of exit travel, provided that other approved exits having sufficient capacity to serve the total occupant load are provided.

#### N. Add Sections 906.8 through 906.12 to the IEBC to read:

906.8 Transoms. In corridor walls required by these provisions Chapter 7 to be fire-resistance rated, existing transoms may be maintained if fixed in the closed position and fixed wired glass set in a steel frame or other approved glazing shall be installed on one side of the transom.

Exception: Transoms conforming to Section 904.4 shall be accepted.

906.9 Finishes. Where interior finish materials are required to have a flame spread index of Class C or better, when tested in accordance with ASTM E 84 or UL 723, existing nonconforming materials shall be surfaced with approved

fire-retardant paint or finish. Exception: Existing nonconforming materials need not be surfaced with an approved fire retardant paint or finish where the building is equipped throughout with an automatic sprinkler system installed in accordance with the VCC and the nonconforming materials can be substantiated as being historic in character.

906.9 Interior finishes and trim materials. When a change of occupancy classification is made to a higher hazard category as indicated in Table 705.2, existing nonconforming interior finish and trim materials shall be permitted to be treated with an approved fire-retardant coating in accordance with the manufacturer's instructions to achieve the required fire rating.

Exception: Such nonconforming materials need not be treated with an approved fire-retardant coating where the building is equipped throughout with an automatic sprinkler system installed in accordance with the VCC and the nonconforming materials can be substantiated as being historic in character.

906.10 One-hour-fire-resistant assemblies. Where one-hour-fire-resistance-rated construction is required by these provisions this code, it need not be provided, regardless of construction or occupancy, where the existing wall and ceiling finish is wood lath and plaster.

906.11 Stairways, <u>railings</u>, and guards. Existing stairways, <u>railings</u>, and <u>guards</u> shall comply with the requirements of these provisions Section 705. The code official shall grant alternatives for stairways approve alternative stairways, <u>railings</u>, and guards if alternative stairways are found to be acceptable or are judged to meet the intent of these provisions. Existing stairways shall comply with Section 904 Section 705.

Exception: For buildings less than 3,000 square feet (279 m<sup>2</sup>), existing conditions are permitted to remain at all stairways, <u>railings</u>, and guards.

906.12 Exit signs. Where exit signs would damage the historic character of the building or structure, alternative locations shall be permitted. Such signs shall identify the exits and exit paths.

906.13 906.12 Exit stair live load. Existing stairways in buildings changed to a Group R 1 or R 2 occupancy When a change of occupancy classification is made to a higher hazard category as indicated in Table 706.2, existing stairways shall be permitted to remain where it can be shown that the stairway can support a 75-pounds-persquare-foot (366 kg/m²) live load.

906.14 Natural light. When the natural light requirements of Section 709.1 will lead to loss of historic character or historic materials in the building, the existing level of natural lighting shall be considered acceptable.

- Q. O. Change Section 907 to Structural.
- R. P. Change Section 907.1 of the IEBC to read:
- 907.1 General. Historic buildings shall comply with the applicable structural provisions for the work as classified in Section 103.10 103.9.

Exception: The code official shall be authorized to accept existing floors and approve operational controls that limit the live load on any such floor.

- S. Delete Sections 907.2 through 907.4, including subsections, of the IEBC.
- T. Delete Section 908 of the IEBC in its entirety.

# 13VAC5-63-435. Chapter 10 Moved buildings and structures.

- A. Change Section 1001 to General.
- B. Change Sections 1001.1 through 1001.3, deleting subsections, of the IEBC to read:
  - 1001.1 Scope. This chapter provides requirements for moved buildings and structures.
  - 1001.2 Conformance. Any repair, alteration, or change of occupancy undertaken within the moved building or structure shall comply with the requirements of this code applicable to the work being performed. Any field fabricated elements shall comply with the requirements of the VCC or the International Residential Code as applicable.
  - 1001.3 Required inspection and repairs. The code official shall be authorized to inspect, or to require approved professionals to inspect at the expense of the owner, the various structural parts of a moved building or structure to verify that structural components and connections have not sustained structural damage. Any repairs required by the code official as a result of such inspection shall be made prior to the final approval.
- C. Change Section 1002 to Requirements.
- D. Change Sections 1002.1 and 1002.2 and add Section 1002.2.1 to the IEBC to read:
  - 1002.1 Location on the lot. The building or structure shall be located on the lot in accordance with the requirements of the VCC or the International Residential Code as applicable.
  - 1002.2 Foundation. The foundation system of moved buildings and structures shall comply with the VCC or the International Residential Code as applicable.
  - 1002.2.1 Connection to the foundation. The connection of the moved building or structure to the foundation shall comply with the VCC or the International Residential Code as applicable.

- E. Add Sections 1002.3 through 1002.6, including subsections, to the IEBC to read:
  - 1002.3 Wind loads. Buildings and structures shall comply with VCC or International Residential Code wind provisions at the new location as applicable.

#### **Exceptions:**

- 1. Detached one-family and two-family dwellings and Group U occupancies where wind loads at the new location are not higher than those at the previous location
- 2. Structural elements whose stress is not increased by more than 10%.
- 1002.4 Seismic loads. Buildings and structures shall comply with VCC or International Residential Code seismic provisions at the new location as applicable.

### **Exceptions:**

- 1. Structures in Seismic Design Categories A and B and detached one-family and two-family dwellings in Seismic Design Categories A, B, and C where the seismic loads at the new location are not higher than those at the previous location.
- 2. Structural elements whose stress is not increased by more than 10%.
- 1002.5 Snow loads. Buildings and structures shall comply with VCC or International Residential Code snow loads as applicable where snow loads at the new location are higher than those at the previous location.

Exception: Structural elements whose stress is not increased by more than 5% 5.0%.

- 1002.6 Flood hazard areas. If moved into a flood hazard area, buildings and structures shall comply with Section 1612 of the VCC, or Section R322 of the International Residential Code, as applicable.
- F. Delete Sections 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, and 1011, and 1012 of the IEBC in their entirety.

#### 13VAC5-63-435.5. Chapter 11 Retrofit requirements.

- A. Replace Chapter 11 of the IEBC with the following:
- B. Change the title of Chapter 11 of the IEBC to "Retrofit Requirements."
- C. Add IEBC for Section 1101 General-

## D. Add Section 1101.1 to the IEBC to read:

1101.1 Scope. In accordance with Section 103.7 of the VCC and as set out in this code 103.3, the following buildings are required to be provided with certain fire protection equipment or systems or other retrofitted components.

#### E. Add Section 1101.2 to the IEBC to read:

1101.2 Smoke detectors alarms in colleges and universities. In accordance with § 36-99.3 of the Code of Virginia, college and university buildings containing dormitories for sleeping purposes shall be provided with battery-powered or AC-powered smoke detector alarm devices installed therein in accordance with this code in effect on July 1, 1982. All public and private college and university dormitories shall have installed such detectors alarms regardless of when the building was constructed. The chief administrative office of the college or university shall obtain a certificate of compliance with the provisions of this subsection from the building official of the locality in which the college or university is located or, in the case of state-owned buildings, from the Director of the Virginia Department of General Services. The provisions of this section shall not apply to any dormitory at a statesupported military college or university that is patrolled 24 hours a day by military guards.

#### F. Add Section 1101.3 to the IEBC to read:

1101.3 Smoke detectors alarms in certain juvenile care facilities. In accordance with § 36-99.4 of the Code of Virginia, battery-powered or AC-powered smoke detectors alarms shall be installed in all local and regional detention homes, group homes, and other residential care facilities for children and juveniles that are operated by or under the auspices of the Virginia Department of Juvenile Justice, regardless of when the building was constructed, by July 1, 1986, in accordance with the provisions of this code that were in effect on July 1, 1984. Administrators of such homes and facilities shall be responsible for the installation of the smoke detector alarm devices.

#### G. Add Section 1101.4 to the IEBC to read:

1101.4 Smoke detectors alarms for the deaf and hearing-impaired. In accordance with § 36-99.5 of the Code of Virginia, smoke detectors alarms providing an effective intensity of not less than 100 candela to warn a deaf or hearing-impaired individual shall be provided, upon request by the occupant to the landlord or proprietor, to any deaf or hearing-impaired occupant of any of the following occupancies, regardless of when constructed:

- 1. All dormitory buildings arranged for the shelter and sleeping accommodations of more than 20 individuals;
- 2. All multiple-family dwellings having more than two dwelling units, including all dormitories and boarding and lodging houses arranged for shelter and sleeping accommodations of more than five individuals; or
- 3. All buildings arranged for use as one-family or two-family dwelling units.

A tenant shall be responsible for the maintenance and operation of the smoke detector alarm in the tenant's unit.

A hotel or motel shall have available no fewer than one such smoke detector alarm for each 70 units or portion thereof, except that this requirement shall not apply to any hotel or motel with fewer than 35 units. The proprietor of the hotel or motel shall post in a conspicuous place at the registration desk or counter a permanent sign stating the availability of smoke detectors alarms for the hearing impaired. Visual detectors alarms shall be provided for all meeting rooms for which an advance request has been made.

# H. Add Sections 1101.5, 1101.5.1, and 1101.5.2 to the IEBC to read:

1101.5 Assisted living facilities (formerly known as adult care residences or homes for adults). Existing In accordance with § 36-99.5 of the Code of Virginia, existing assisted living facilities licensed by the Virginia Department of Social Services shall comply with sections Sections 1101.5.1 and 1101.5.2.

1101.5.1 Fire protective signaling system and fire detection system. A fire protective signaling system and an automatic fire detection system meeting the requirements of the USBC, Volume I, 1987 Edition, Third Amendment, shall be installed in assisted living facilities by August 1, 1994.

Exception: Assisted living facilities that are equipped throughout with a fire protective signaling system and an automatic fire detection system.

1101.5.2 Single-station and multiple-station smoke detectors alarms. Battery-powered or AC-powered single-station and multiple-station smoke detectors alarms meeting the requirements of the USBC, Volume I, 1987 Edition, Third Amendment, shall be installed in assisted living facilities by August 1, 1994.

Exception: Assisted living facilities that are equipped throughout with single-station and multiple-station smoke detectors alarms.

#### I. Add Section 1101.6 to the IEBC to read:

1101.6 Smoke detectors alarms in buildings containing dwelling units. AC-powered smoke detectors alarms with battery backup or an equivalent device shall be required to be installed to replace a defective or inoperative battery-powered smoke detector alarm located in buildings containing one or more dwelling units or rooming houses offering to rent overnight sleeping accommodations when it is determined by the building official that the responsible party of such building or dwelling unit fails to maintain battery-powered smoke detectors alarms in working condition.

#### J. Add Section 1101.7 to the IEBC to read:

1101.7 Fire suppression, fire alarm, and fire detection systems in nursing homes and facilities. Fire In accordance with § 36-99.5 of the Code of Virginia, fire suppression systems as required by the edition of this code in effect on October 1, 1990, shall be installed in all nursing facilities licensed by the Virginia Department of Health by January 1, 1993, regardless of when such facilities or institutions were constructed. Units consisting of certified long-term care beds located on the ground floor of general hospitals shall be exempt from the requirements of this section.

Fire alarm or fire detector systems, or both, as required by the edition of this code in effect on October 1, 1990, shall be installed in all nursing homes and nursing facilities licensed by the Virginia Department of Health by August 1, 1994.

#### K. Add Section 1101.8 to the IEBC to read:

1101.8 Fire suppression systems in hospitals. Fire In accordance with § 36-99.1 of the Code of Virginia, fire suppression systems shall be installed in all hospitals licensed by the Virginia Department of Health as required by the edition of this code in effect on October 1, 1995, regardless of when such facilities were constructed.

#### L. Add Section 1101.9 to the IEBC to read:

1101.9 Identification of disabled parking spaces by above grade signage. All In accordance with § 36-99.11 of the Code of Virginia, all parking spaces reserved for the use of persons with disabilities shall be identified by above grade signs, regardless of whether identification of such spaces by above grade signs was required when any particular space was reserved for the use of persons with disabilities. A sign or symbol painted or otherwise displayed on the pavement of a parking space shall not constitute an above grade sign. Any parking space not identified by an above grade sign shall not be a parking space reserved for the disabled within the meaning of this section. All above grade disabled parking space signs shall have the bottom edge of the sign no lower than 4 feet (1219 mm) nor higher than 7 feet (2133 mm) above the parking surface. Such signs shall be designed and constructed in accordance with the provisions of Chapter 11 of this code. All disabled parking signs shall include the following language: "PENALTY, \$100-500 Fine, TOW-AWAY ZONE." Such language may be placed on a separate sign and attached below existing above grade disabled parking signs, provided that the bottom edge of the attached sign is no lower than 4 feet above the parking surface.

### M. Add Section 1101.10 to the IEBC to read:

1101.10 Smoke detectors alarms in hotels and motels. Smoke detectors alarms shall be installed in hotels and motels as required by the edition of VR 394-01-22, USBC,

Volume II, in effect on March 1, 1990, by the dates indicated, regardless of when constructed.

#### N. Add Section 1101.11 to the IEBC to read:

1101.11 Sprinkler systems in hotels and motels. By September 1, 1997, an automatic sprinkler system shall be installed in hotels and motels as required by the edition of VR 394-01-22, USBC, Volume II, in effect on March 1, 1990, regardless of when constructed.

#### O. Add Section 1101.12 to the IEBC to read:

1101.12 Fire suppression systems in dormitories. An In accordance with § 36-99.3 of the Code of Virginia, an automatic fire suppression system shall be provided throughout all buildings having a Group R-2 fire area that are more than 75 feet (22,860 mm) or six stories above the lowest level of exit discharge and are used, in whole or in part, as a dormitory to house students by any public or private institution of higher education, regardless of when such buildings were constructed, in accordance with the edition of this code in effect on August 20, 1997, and the requirements for sprinkler systems under the edition of the NFPA 13 standard referenced by that code. The automatic fire suppression system shall be installed by September 1, 1999. The chief administrative office of the college or university shall obtain a certificate of compliance from the building official of the locality in which the college or university is located or, in the case of state-owned buildings, from the Director of the Virginia Department of General Services.

- 1. Buildings equipped with an automatic fire suppression system in accordance with Section 903.3.1.1 of the 1983 or later editions of NFPA 13.
- 2. Any dormitory at a state-supported military college or university that is patrolled 24 hours a day by military guards.
- 3. Application of the requirements of this section shall be modified in accordance with the following:
- 3.1. Building systems, equipment, or components other than the fire suppression system shall not be required to be added or upgraded except as necessary for the installation of the fire suppression system and shall only be required to be added or upgraded where the installation of the fire suppression system creates an unsafe condition.
- 3.2. Residential sprinklers shall be used in all sleeping rooms. Other sprinklers shall be quick response or residential unless deemed unsuitable for a space. Standard response sprinklers shall be used in elevator hoistways and machine rooms.

- 3.3. Sprinklers shall not be required in wardrobes in sleeping rooms that are considered part of the building construction or in closets in sleeping rooms when such wardrobes or closets (i) do not exceed 24 square feet (2.23 m²) in area, (ii) have the smallest dimension less than 36 inches (914 mm), and (iii) comply with all of the following:
- 3.3.1. A single-station smoke <u>detector alarm</u> monitored by the building fire alarm system is installed in the room containing the wardrobe or closet that will activate the general alarm for the building if the single station smoke <u>detector alarm</u> is not cleared within five minutes after activation.
- 3.3.2. The minimum number of sprinklers required for calculating the hydraulic demand of the system for the room shall be increased by two, and the two additional sprinklers shall be corridor sprinklers where the wardrobe or closet is used to divide the room. Rooms divided by a wardrobe or closet shall be considered one room for the purpose of this requirement.
- 3.3.3. The ceiling of the wardrobe, closet, or room shall have a fire resistance rating of not less than 1/2 hour.
- 3.4. Not more than one sprinkler shall be required in bathrooms within sleeping rooms or suites having a floor area between 55 square feet (5.12 m<sup>2</sup>) and 120 square feet (11.16 m<sup>2</sup>), provided the sprinkler is located to protect the lavatory area and the plumbing fixtures are of a noncombustible material.
- 3.5. Existing standpipe residual pressure shall be permitted to be reduced when the standpipe serves as the water supply for the fire suppression system, provided the water supply requirements of NFPA 13-94 are met.
- 3.6. Limited service controllers shall be permitted for fire pumps when used in accordance with their listing.
- 3.7. Where a standby power system is required, a source of power in accordance with Section 701-11(d) or 701-11(e) of NFPA 70-96 shall be permitted.

#### P. Add Section 1101.13 to the IEBC to read:

1101.13 Fire extinguishers and smoke detectors alarms in SRCFs. SRCFs shall be provided with at least one approved type ABC portable fire extinguisher with a minimum rating of 2A10BC installed in each kitchen. In addition, SRCFs shall provide at least one approved and properly installed battery operated smoke detector alarm outside of each sleeping area in the vicinity of bedrooms and bedroom hallways and on each additional floor.

## Q. Add Section 1101.14 to the IEBC to read:

1101.14 Smoke detectors alarms in adult day care centers.

Battery powered In accordance with § 36-99.5 of the Code of Virginia, battery-powered or AC-powered smoke

detector <u>alarm</u> devices shall be installed in all adult day care centers licensed by the Virginia Department of Social Services, regardless of when the building was constructed. The location and installation of the smoke <u>detectors alarms</u> shall be determined by the provisions of this code in effect on October 1, 1990. The licensee shall obtain a certificate of compliance from the building official of the locality in which the center is located or, in the case of state-owned buildings, from the Director of the Virginia Department of General Services.

#### R. Add Section 1101.15 to the IEBC to read:

1101.15 Posting of occupant load. Every room or space that is an assembly occupancy, and where the occupant load of that room or space is 50 or more, shall have the occupant load of the room or space as determined by the building official posted in a conspicuous place near the main exit or exit access doorway from the room or space. Posted signs shall be of an approved legible permanent design and shall be maintained by the owner or owner's authorized agent.

#### S. Add Section 1101.16 to the IEBC to read:

1101.16 ALFSTs. Existing ALFSTs, regardless of when constructed, shall by October 1, 2011, meet the applicable requirements of API 653 and TFI RMIP for suitability for service and inspections and shall provide a secondary containment system complying with Section 426.3 430.3 of the VCC.

#### T. Add Section 1101.17 to the IEBC to read:

1101.17 Standards for replacement glass. In accordance with § 36 99.2 of the Code of Virginia, any replacement glass installed in buildings constructed prior to the first edition of the USBC shall meet the quality and installation standards for glass installed in new buildings as are in effect at the time of installation. In addition, as a requirement of this code, the installation or replacement of glass in buildings constructed under any edition of the USBC shall be as required for new installations.

U. Delete Sections 1102 through 1106 of the IEBC in their entirety.

#### 13VAC5-63-438. Chapter 12 Construction safeguards.

A. Replace Chapter 12 of the IEBC with the following:

B. Change the title of Chapter 12 of the IEBC to "Construction Safeguards."

C. Add 1. Section 1201 General.

#### D. Add Sections 1201.1 through 1201.4 to the IEBC to read:

1201.1 Scope. The provisions of this chapter shall govern safety during construction that is under the jurisdiction of this code and the protection of adjacent public and private properties.

1201.2 Storage and placement. Construction equipment and materials shall be stored and placed so as not to endanger the public, the workers, or adjoining property for the duration of the construction project.

1201.3 Alterations, repairs, and additions. Required exits, existing structural elements, fire protection devices, and sanitary safeguards shall be maintained at all times during alterations, repairs, or additions to any building or structure.

#### **Exceptions:**

- 1. When such required elements or devices are being altered or repaired, adequate substitute provisions shall be made.
- 2. When the existing building is not occupied.
- 1201.4 Manner of removal. Waste materials shall be removed in a manner which prevents injury or damage to persons, adjoining properties, and public rights-of-way.

# E. Add Sections 1201.5 through 1201.7, including subsections, to the IEBC to read:

1201.5 Fire safety during construction. Fire safety during construction shall comply with the applicable requirements of the International Building Code and the applicable provisions of Chapter 33 of the International Fire Code.

1201.6 Protection of pedestrians. Pedestrians shall be protected during construction and demolition activities as required by <u>Section Sections</u> 1201.6.1 through 1201.6.7 and Table 1201.6. Signs shall be provided to direct pedestrian traffic.

1201.6.1 Walkways. A walkway shall be provided for pedestrian travel in front of every construction and demolition site unless the applicable governing authority authorizes the sidewalk to be fenced or closed. Walkways shall be of sufficient width to accommodate the pedestrian traffic, but in no case shall they be less than 4 feet (1219 mm) in width. Walkways shall be provided with a durable walking surface. Walkways shall be accessible in accordance with Chapter 11 of the International Building Code and shall be designed to support all imposed loads and in no case shall the design live load be less than 150 pounds per square foot (psf) (7.2 kN/m²).

1201.6.2 Directional barricades. Pedestrian traffic shall be protected by a directional barricade where the walkway extends into the street. The directional barricade shall be of sufficient size and construction to direct vehicular traffic away from the pedestrian path.

1201.6.3 Construction railings. Construction railings shall be at least 42 inches (1067 mm) in height and shall be sufficient to direct pedestrians around construction areas.

1201.6.4 Barriers. Barriers shall be a minimum of 8 feet (2438 mm) in height and shall be placed on the side of the walkway nearest the construction. Barriers shall extend the entire length of the construction site. Openings in such barriers shall be protected by doors which are normally kept closed.

1201.6.4.1 Barrier design. Barriers shall be designed to resist loads required in Chapter 16 of the International Building Code unless constructed as follows:

- 1. Barriers shall be provided with 2-inch by 4-inch top and bottom plates.
- 2. The barrier material shall be a minimum of 3/4-inch (19.1 mm) boards or 1/4-inch (6.4 mm) wood structural use panels.
- 3. Wood structural use panels shall be bonded with an adhesive identical to that for exterior wood structural use panels.
- 4. Wood structural use panels 1/4-inch (6.4 mm) or 1/16-inch (1.6 mm) in thickness shall have studs spaced not more than 2 feet (610 mm) on center.
- 5. Wood structural use panels 3/8-inch (9.5 mm) or 1/2-inch (12.7 mm) in thickness shall have studs spaced not more than 4 feet (1219 mm) on center, provided a 2-inch by 4-inch (51 mm by 102 mm) stiffener is placed horizontally at the mid-height where the stud spacing exceeds 2 feet (610 mm) on center.
- 6. Wood structural use panels 5/8-inch (15.9 mm) or thicker shall not span over 8 feet (2438 mm).

1201.6.5 Covered walkways. Covered walkways shall have a minimum clear height of 8 feet (2438 mm) as measured from the floor surface to the canopy overhead. Adequate lighting shall be provided at all times. Covered walkways shall be designed to support all imposed loads. In no case shall the design live load be less than 150 psf (7.2 kN/m²) for the entire structure.

Exception:Roofs and supporting structures of covered walkways for new, light-frame construction not exceeding two stories above grade plane are permitted to be designed for a live load of 75 psf (3.6 kN/m²) or the loads imposed on them, whichever is greater. In lieu of such designs, the roof and supporting structure of a covered walkway are permitted to be constructed as follows:

- 1. Footings shall be continuous 2-inch by 6-inch members.
- 2. Posts not less than 4-inches by 6-inches shall be provided on both sides of the roof and spaced not more than 12 feet (3658 mm) on center.
- 3. Stringers not less than 4-inches by 12-inches shall be placed on edge upon the posts.

- 4. Joists resting on the stringers shall be at least 2-inches by 8-inches and shall be spaced not more than 2 feet (610 mm) on center.
- 5. The deck shall be planks at least 2 inches (51 mm) thick or wood structural panels with an exterior exposure durability classification at least 2-3/32-inch (18.3 mm) thick nailed to the joists.
- 6. Each post shall be knee-braced to joists and stringers by 2-inch by 4-inch minimum members 4 feet (1219 mm) long.
- 7. A 2-inch by 4-inch minimum curb shall be set on edge along the outside edge of the deck.

1201.6.6 Repair, maintenance and removal. Pedestrian protection required by Section 1201.6 shall be maintained in place and kept in good order for the entire length of time pedestrians may be endangered. The owner or the owner's agent, upon the completion of the construction activity, shall immediately remove walkways, debris, and other obstructions and leave such public property in as good a condition as it was before such work was commenced.

TABLE 1201.6 PROTECTION OF PEDESTRIANS		
HEIGHT OF CONSTRUCTION	DISTANCE OF CONSTRUCTION TO LOT LINE	TYPE OF PROTECTION REQUIRED
8 feet or less	Less than 5 feet	Construction railings
	5 feet or more	None
More than 8 feet	Less than 5 feet	Barrier and covered walkway
	5 feet or more, but not more than 1/4 the height of construction	Barrier and covered walkway
	5 feet or more, but between 1/4 and 1/2 the height of construction	Barrier
	5 feet or more, but exceeding 1/2 the height of construction	None

1201.6.7 Adjacent to excavations. Every excavation on a site located 5 feet (1524 mm) or less from the street lot line shall be enclosed with a barrier not less than 6 feet (1829 mm) high. Where located more than 5 feet (1524 mm) from the street lot line, a barrier shall be erected when required by the code official. Barriers shall be of adequate

strength to resist wind pressure as specified in Chapter 16 of the International Building Code.

1201.7 Facilities required. Sanitary facilities shall be provided during construction or demolition activities in accordance with the International Plumbing Code.

F. Change 2. Section 1202 to Protection of Adjoining Properties.

#### G. Change Section 1202.1 to the IEBC to read:

1202.1 Protection required. Adjoining public and private property shall be protected from damage during construction and demolition work. Protection must be provided for footings, foundations, party walls, chimneys, skylights, and roofs. Provisions shall be made to control water runoff and erosion during construction or demolition activities. The person making or causing an excavation to be made shall provide written notice to the owners of adjoining buildings advising them that the excavation is to be made and that the adjoining buildings should be protected. This notification shall be delivered not less than 10 days prior to the scheduled starting date of the excavation.

#### H. Delete Sections 1202.2 through 1202.4 of the IEBC.

I. Change 3. Section 1203 Temporary Use of Streets, Alleys and Public Property.

# J. Change Sections 1203.1 through 1203.3 to the IEBC to read:

1203.1 Storage and handling of materials. The temporary use of streets or public property for the storage or handling of materials or equipment required for construction or demolition and the protection provided to the public shall comply with the provisions of the applicable governing authority and this chapter.

1203.2 Obstructions. Construction materials and equipment shall not be placed or stored so as to obstruct access to fire hydrants, standpipes, fire or police alarm boxes, catch basins, or manholes nor shall such material or equipment be located within 20 feet (6.1 m) of a street intersection or placed so as to obstruct normal observations of traffic signals or to hinder the use of public transit loading platforms.

1203.3 Utility fixtures. Building materials, fences, sheds or any obstruction of any kind shall not be placed to obstruct free approach to any fire hydrant, fire department connection, utility pole, manhole, fire alarm box, or catch basin or to interfere with the passage of water in the gutter. Protection against damage shall be provided to such utility fixtures during the progress of the work, but sight of them shall not be obstructed.

K. Delete Sections 1203.4 through 1203.12, including subsections, of the IEBC.

L. Add 4. Section 1204 Fire Extinguishers.

# M. Change Section 1204.1, deleting subsections, and add Section 1204.2 to the IEBC to read:

1204.1 Where required. All structures under construction, alteration, or demolition shall be provided with not less than one approved portable fire extinguisher in accordance with Section 906 of the International Building Codeand sized for not less than ordinary hazard as follows:

- 1. At each stairway on all floor levels where combustible materials have accumulated.
- 2. In every storage and construction shed.
- 3. Additional portable fire extinguishers shall be provided where special hazards exist including the storage and use of flammable and combustible liquids.

1204.2 Fire hazards. The provisions of this code and of the International Fire Code shall be strictly observed to safeguard against all fire hazards attendant upon construction operations.

N. Change 5. Section 1205 to Means of Egress.

### O. Change Sections 1205.1 and 1205.2 to the IEBC to read:

1205.1 Stairways required. Where a building has been constructed to a building height of 50 feet (15,240 mm) or four stories, or where an existing building exceeding 50 feet (15,240 mm) in building height is altered, at least one temporary lighted stairway shall be provided unless one or more of the permanent stairways are erected as the construction progresses.

1205.2 Maintenance of means of egress. Required means of egress shall be maintained at all times during construction, demolition, remodeling or alterations, and additions to any building.

Exception: Approved temporary means of egress systems and facilities.

#### P. Delete Sections 1205.3 through 1205.15 of the IEBC.

Q. Change 6. Section 1206 to Standpipe Systems.

# R. Change Sections 1206.1 through 1206.2 and add Section 1206.3 to the IEBC to read:

1206.1 Where required. In buildings required to have standpipes by Section 905.3.1 of the International Building Code, not less than one standpipe shall be provided for use during construction. Such standpipes shall be installed prior to construction exceeding 40 feet (12 192 (12,192 mm)) in height above the lowest level of fire department vehicle access. Such standpipe shall be provided with fire department hose connections at accessible locations adjacent to usable stairways. Such standpipes shall be extended as construction progresses to within one floor of

the highest point of construction having secured decking or flooring.

1206.2 Buildings being demolished. Where a building or portion of a building is being demolished and a standpipe is existing within such a building, such standpipe shall be maintained in an operable condition to be available for use by the fire department. Such standpipe shall be demolished with the building but shall not be demolished more than one floor below the floor being demolished.

1206.3 Detailed requirements. Standpipes shall be installed in accordance with the provisions of Chapter 9 of the International Building Code.

Exception: Standpipes shall be either temporary or permanent in nature and with or without a water supply, provided that such standpipes conform to the requirements of Section 905 of the International Building Code as to capacity, outlets and materials.

S. Add 7. Section 1207 Automatic Sprinkler System.

#### T. Add Sections 1207.1 and 1207.2 to the IEBC to read:

1207.1 Completion before occupancy. In portions of a building where an automatic sprinkler system is required by this code, it shall be unlawful to occupy those portions of the building until the automatic sprinkler system installation has been tested and approved, except as provided in Section 110.3.

1207.2 Operation of valves. Operation of sprinkler control valves shall be permitted only by properly authorized personnel and shall be accompanied by notification of duly designated parties. When the sprinkler protection is being regularly turned off and on to facilitate connection of newly completed segments, the sprinkler control valves shall be checked at the end of each work period to ascertain that protection is in service.

U. Add 8. Section 1208 Accessibility.

#### V. Add Section 1208.1 to the IEBC to read:

1208.1 Construction sites. Structures, sites, and equipment directly associated with the actual process of construction, including scaffolding, bridging, material hoists, material storage, or construction trailers are not required to be accessible.

W. Add <u>9.</u> Section 1209 Water Supply for Fire Protection.

#### X. Add Section 1209.1 to the IEBC to read:

1209.1 When required. An approved water supply for fire protection, either temporary or permanent, shall be made available as soon as combustible material arrives on the site.

603.9.1 603.5

#### 10. Section 1210 Demolition.

1210.1 Construction documents. Construction documents and a schedule for demolition shall be submitted where required by the building official. Where such information is required, no work shall be done until such construction documents, schedule, or both are approved.

1210.2 Pedestrian protection. The work of demolishing any building shall not be commenced until pedestrian protection is in place as required by Chapter 33 of the VCC.

1210.3 Means of egress. A horizontal exit shall not be destroyed unless and until a substitute means of egress has been provided and approved.

1210.4 Vacant lot. Where a structure has been demolished or removed, the vacant lot shall be filled and maintained to the existing grade or in accordance with the ordinances of the jurisdiction having authority.

1210.5 Water accumulation. Provision shall be made to prevent the accumulation of water or damage to any foundations on the premises or the adjoining property.

1210.6 Utility connections. Service utility connections shall be discontinued and capped in accordance with the approved rules and the requirements of the applicable governing authority.

1210.7 Fire safety during demolition. Fire safety during demolition shall comply with the applicable requirements of the VCC and the applicable provisions of Chapter 33 of the International Fire Code.

#### 13VAC5-63-439. Chapter 13 Referenced standards.

Referenced standards are listed in the following table:

Standard reference number	Title	Referenced in code section number
API 653-09	Tank Inspection, Repair, Alteration and Reconstruction	1101.16
ASCE/SEI <del>7-10</del> <u>7-16</u>	American Society of Civil Engineers Structural Engineering Institute	305.2.1, 603.7.4, 603.7.6
ASCE/SEI 4 <del>1-13</del> 41-17	American Society of Civil Engineers Structural Engineering Institute	305.2, 305.2.1, 305.2.2, 502.2.2.1, 502.2.2.3, 502.3.1, 502.3.3, 603.7.4, 603.7.5, 603.7.6, 803.3

62.1-2013 62.1-2016	and Air Conditioning Engineers	<del>603.9.1</del> <u>603.5</u>
ASME A17.1/CSA <del>B44-2013</del> <u>B44-2016</u>	American Society of Mechanical Engineers	404.4.2 <del>,</del> 604.3.1.2
ASME A17.3-2008	American Society of Mechanical Engineers	604.3.1.2
ASME A18.1-2008 A18.1-2014	American Society of Mechanical Engineers	404.4.3
ASTM E 84-13A	ASTM International	<del>906.9</del>
ASTM E 108-11	ASTM International	<del>906.5</del>
ASTM F 2006-10 F2006-17	ASTM International	304.2
ASTM <del>F</del> 2090-10 F2090-17	ASTM International	304.2
ICC A117.1-09	Accessible and Usable Buildings and Facilities	404.4.2, 404.4.3, 404.4.10
<del>IFC-15</del> <u>IFC-18</u>	International Fire Code	103.3, 603.5.4.1
NFPA <del>13-13</del> <u>13-16</u>	Standard for the Installation of Sprinkler Systems	1101.12
NFPA <del>13R-13</del> <u>13R-16</u>	Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height	603.5.2.5
NFPA 70-96	National Electrical <u>Code</u>	<u>1101.12</u>
NFPA <del>70-14</del> <u>70-17</u>	National Electrical Code	504.1.1, 504.1.2, 504.1.3, 504.1.4, 504.1.5, 603.8.1, 603.8.3.4, 603.8.3.7, 708.1, 708.2, 708.3
NFPA <del>72-13</del> 72-16	National Fire Alarm and Signaling Code	603.5.2.5, 603.5.4
NFPA <del>99-15</del> 99-18	Health Care Facilities Code	504.1.4

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NFPA <del>101-15</del> <u>101-18</u>	Life Safety Code	603.6
<del>UL 723-08</del>	Standard for Test for Surface Burning Characteristics of Building Materials with Revisions Through September 2010	<del>906.9</del>
<del>UL 790-04</del>	Standard Test Methods for Tests of Roof Coverings with Revisions through October 2008	<del>906.7</del>
TFI RMIP-09	Aboveground Storage Tanks Containing Liquid Fertilizer, Recommended Mechanical Integrity Practices	1101.16

# 13VAC5-63-440. Chapter 14 Compliance alternative – Change of occupancy.

# A. Change Section 1401.1 of the IEBC to read: Replace Chapter 14 of the IEBC with the following for General:

1401.1 Scope. The provisions of this chapter are intended to maintain or increase the current degree of public safety, health, and general welfare in existing buildings or structures, while permitting changes of occupancy without requiring full compliance with Chapter 7, except where compliance with other provisions of this code is specifically required in this chapter.

Exception: The provisions of this chapter shall not apply to buildings with occupancies in Group H or I.

#### B. Change Section 1401.1.1 of the IEBC to read:

1401.1.1 Complete change of occupancy. Where an entire existing building undergoes a change of occupancy, the applicable provisions of this chapter for the new occupancy shall be used to determine compliance with this code.

Exception: Plumbing, mechanical, and electrical systems in buildings undergoing a change of occupancy shall be subject to any applicable requirements of Chapter 7.

## C. Change Section 1401.1.2 of the IEBC to read:

1401.1.2 Partial change of occupancy. Where a portion of the building undergoes a change of occupancy and that portion is separated from the remainder of the building with fire barrier or horizontal assemblies having a fire-resistance rating as required by Table 508.4 of the VCC or Section R317 of the International Residential Code for the separate occupancies, or with approved compliance alternatives, the portion changed shall be made to conform to the provisions of this chapter.

Where a portion of the building undergoes a change of occupancy and that portion is not separated from the remainder of the building with fire barriers or horizontal assemblies having a fire-resistance rating as required by Table 508.4 of the VCC or Section R317 of the International Residential Code for the separate occupancies, or with approved compliance alternatives, the provisions of this chapter which apply to each occupancy shall apply to the entire building. Where there are conflicting provisions, those requirements that are the most restrictive shall apply to the entire building or structure.

# D. Change Section 1401.2 and delete Sections 1401.2.1 through 1401.2.5 of the IEBC.

1401.2 Accessibility requirements. All portions of the buildings proposed for change of occupancy to existing buildings or structures shall conform to the applicable accessibility provisions of Chapter 4.

#### E. Change Section 1401.3 of the IEBC to read:

1401.3 Acceptance. For changes of occupancy to existing buildings that are evaluated in accordance with this chapter, compliance with this chapter shall be accepted by the code official.

# F. Change Section 1401.3.1 and delete Sections 1401.3.2 and 1401.3.3 of the IEBC.

1401.3.1 Compliance with flood hazard provisions. In flood hazard areas, buildings or structures that are evaluated in accordance with this chapter shall comply with Section 1612 of the VCC or Section R322 of the International Residential Code, as applicable if the work covered by this chapter constitutes substantial improvement.

#### G. Change Section 1401.4 of the IEBC to read:

1401.4 Investigation and evaluation. For proposed work covered by this chapter, the building owner shall cause the existing building to be investigated and evaluated in accordance with the provisions of Sections 1401.4 through 1401.9.

## H. Change Section 1401.4.1 of the IEBC to read:

1401.4.1 Structural analysis. The owner shall have a structural analysis of the existing building made to determine adequacy of structural systems for the proposed alteration, addition, or change of occupancy. The analysis shall demonstrate that the building with the work completed is capable of resisting the loads specified in Chapter 16 of the VCC.

#### I. Change Section 1401.4.2 of the IEBC to read:

1401.4.2 Submittal. The results of the investigation and evaluation as required in Section 1401.4 along with

proposed compliance alternatives shall be submitted to the code official.

### J. Change Section 1401.4.3 of the IEBC to read:

1401.4.3 Determination of compliance. The code official shall determine whether the existing building with the proposed change of occupancy complies with the provisions of this section in accordance with the evaluation process in Sections 1401.5 through 1401.9.

## K. Change Section 1401.5 of the IEBC to read:

1401.5 Evaluation. The evaluation shall be comprised of three categories: fire safety, means of egress, and general safety, as defined in Sections 1401.5.1 through 1401.5.3.

## L. Change Section 1401.5.1 of the IEBC to read:

1401.5.1 Fire safety. Included within the fire safety category are the structural fire resistance, automatic fire detection, fire alarm, automatic sprinkler system, and fire suppression system features of the facility.

#### M. Change Section 1401.5.2 of the IEBC to read:

1401.5.2 Means of egress. Included within the means of egress category are the configuration, characteristics, and support features for means of egress in the facility.

#### N. Change Section 1401.5.3 of the IEBC to read:

1401.5.3 General safety. Included within the general safety category are the fire safety parameters and the means-of-egress parameters.

## O. Change Section 1401.6 of the IEBC to read:

1401.6 Evaluation process. The evaluation process specified in this code shall be followed in its entirety to evaluate existing buildings. Table 1401.7 shall be utilized for tabulating the results of the evaluation. References to other sections of this code indicate that compliance with those sections is required in order to gain credit in the evaluation outlined in this code. In applying this section to a building with mixed occupancies, where the separation between the mixed occupancies does not qualify for any category indicated in Section 1401.6.16, the score for each occupancy shall be determined, and the lower score determined for each section of the evaluation process shall apply to the entire building.

Where the separation between the mixed occupancies qualifies for any category indicated in Section 1401.6.16, the score for each occupancy shall apply to each portion, or smoke compartment of the building based on the occupancy of the space.

### P. Change Section 1401.6.1 of the IEBC to read:

1401.6.1 Building height and number of stories. The value for building height and number of stories shall be the lesser value determined by the formula in Section 1401.6.1.1.

Section 504 of the International Building Code VCC shall be used to determine the allowable height and number of stories of the building. Subtract the actual building height from the allowable height and divide by 12-1/2 feet (3810 mm). Enter the height value and its sign (positive or negative) in Table 1401.7 under Safety Parameter 1401.6.1, Building Height, for fire safety, means of egress, and general safety. The maximum score for a building shall be 10.

#### Q. Change Section 1401.6.2 of the IEBC to read:

1401.6.2 Building area. The value for building area shall be determined by the formula in Section 1401.6.2.2. Section 506 of the VCC and the formula in Section 1401.6.2.1 shall be used to determine the allowable area of the building. Subtract the actual building area from the allowable area and divide by 1,200 square feet (112 m²). Enter the area value and its sign (positive or negative) in Table 1401.7 under Safety Parameter 1401.6.2, Building Area, for fire safety, means of egress and general safety. In determining the area value, the maximum permitted positive value for area is 50% of the fire safety score as listed in Table 1401.8, Mandatory Safety Scores.

## R. Change Section 1401.6.4 of the IEBC to read:

1401.6.3 Compartmentation. Evaluate the compartments created by fire barriers or horizontal assemblies that comply with Sections 1401.6.3.1 and 1401.6.3.2 and are exclusive of the wall elements considered under Sections 1401.6.4 and 1401.6.5. Conforming compartments shall be figured as the net area and do not include shafts, chases, stairways, walls, or columns. Using Table 1401.6.3, determine the appropriate compartmentation value (CV) and enter that value into Table 1401.7 under Safety Parameter 1401.6.3, Compartmentation, for fire safety, means of egress, and general safety. For compartment sizes that fall between categories, the determination of the CV shall be permitted to be obtained by linear interpolation.

1401.6.4 Tenant and dwelling unit separations. Evaluate the fire-resistance rating of floors and walls separating tenants, including dwelling units, and not evaluated under Sections 1401.6.3 and 1401.6.5.

## S. Change Section 1401.6.7 of the IEBC to read:

1401.6.7 HVAC systems. Evaluate the ability of the HVAC system to resist the movement of smoke and fire beyond the point of origin. Under the categories in Section 1401.6.7.1, determine the appropriate value and enter that value into Table 1401.7 under Safety Parameter 1401.6.7, HVAC Systems, for fire safety, means of egress, and general safety.

## T. Change Section 1401.6.8 of the IEBC to read:

1401.6.8 Automatic fire detection. Evaluate the smoke detection capability based on the location and operation of

automatic fire detectors in accordance with Section 907 of the VCC and the International Mechanical Code. Under the categories and occupancies in Table 1401.6.8, determine the appropriate value and enter that value into Table 1401.7 under Safety Parameter 1401.6.8, Automatic Fire Detection, for fire safety, means of egress, and general safety.

## U. Change Section 1401.6.8.1 of the IEBC to read:

1401.6.8.1 Categories. The categories for automatic fire detection are:

- 1. Category a None.
- 2. Category b Existing smoke detectors in HVAC systems.
- 3. Category c Smoke detectors in HVAC systems. The detectors are installed in accordance with the requirements for new buildings in the International Mechanical Code.
- 4. Category d Smoke detectors throughout all floor areas other than individual sleeping units, tenant spaces, and dwelling units.
- 5. Category e Smoke detectors installed throughout the floor area.
- 6. Category f Smoke detectors in corridors only.

### V. Change Section 1401.6.14 of the IEBC to read:

1401.6.14 Elevator control. Evaluate the passenger elevator equipment and controls that are available to the fire department to reach all occupied floors. Emergency recall and in-car operation of elevators shall be provided in accordance with the building code under which the building or the affected portion thereof was constructed or previously approved. Under the categories and occupancies in Table 1401.5.14, determine the appropriate value and enter that value into Table 1401.7 under Safety Parameter 1401.5.14, Elevator Control, for fire safety, means of egress and general safety. The values shall be zero for a single-story building.

## W. Change Section 1401.6.14.1 of the IEBC to read:

1401.6.14.1 Categories. The categories for elevator controls are:

- 1. Category a No elevator.
- 2. Category b Any elevator without Phase I emergency recall operation and Phase II emergency in-car operation.
- 3. Category c All elevators with Phase I emergency recall operation and Phase II emergency in-car operation as required by the building code under which the building or the affected portion thereof was constructed or previously approved.

4. Category d - All meet Category c or Category b where permitted to be without Phase I emergency recall operation and Phase II emergency in-car operation, and there is at least one elevator that complies with new construction requirements serves all occupied floors.

#### X. Change Section 1401.6.16 of the IEBC to read:

1401.6.16 Mixed occupancies. Where a building has two or more occupancies that are not in the same occupancy classification, the separation between the mixed occupancies shall be evaluated in accordance with this section. Where there is no separation between the mixed occupancies or the separation between mixed occupancies does not qualify for any of the categories indicated in Section 1401.6.16.1, the building shall be evaluated as indicated in Section 1401.6, and the value for mixed occupancies shall be zero. Under the categories and occupancies in Table 1401.6.16, determine the appropriate value and enter that value into Table 1401.7 under Safety Parameter 1401.6.16, Mixed Occupancies, for fire safety and general safety. For buildings without mixed occupancies, the value shall be zero.

### Y. Change Section 1401.6.17 of the IEBC to read:

1401.6.17 Automatic sprinklers. Evaluate the ability to suppress a fire based on the installation of an automatic sprinkler system in accordance with Section 903.3.1.1 of the VCC. "Required sprinklers" shall be based on the requirements of this code. Under the categories and occupancies in Table 1401.6.17, determine the appropriate value and enter that value into Table 1401.7 under Safety Parameter 1401.6.17, Automatic Sprinklers, for fire safety, means of egress divided by two, and general safety. Highrise buildings defined in Chapter 2 of the VCC that undergo a change of occupancy to Group R shall be equipped throughout with an automatic sprinkler system in accordance with Section 403 of the VCC and Chapter 9 of the VCC.

#### Z. Change Section 1401.6.20 of the IEBC to read:

1401.6.20 Smoke compartmentation. Evaluate the smoke compartments for compliance with Section 407.5 of the VCC. Under the categories and occupancies in Table 1401.6.20, determine the appropriate smoke compartmentation value (SCV) and enter that value into Table 1401.7 under Safety Parameter 1401.6.20, Smoke Compartmentation, for fire safety, means of egress and general safety.

# 13VAC5-63-445. Chapter 17 Retrofit requirements. (Repealed.)

- A. Add IEBC Section 1701 General.
- B. Add Section 1701.1 to the IEBC to read:

1701.1 Scope. In accordance with Section 103.7 of the VCC and as set out herein, the following buildings are required to be provided with certain fire protection equipment or systems or other retrofitted components.

#### C. Add Section 1701.2 to the IEBC to read:

1701.2 Smoke detectors in colleges and universities. In accordance with § 36 99.3 of the Code of Virginia, college and university buildings containing dormitories for sleeping purposes shall be provided with battery powered or AC powered smoke detector devices installed therein in accordance with this code in effect on July 1, 1982. All public and private college and university dormitories shall have installed such detectors regardless of when the building was constructed. The chief administrative office of the college or university shall obtain a certificate of compliance with the provisions of this subsection from the building official of the locality in which the college or university is located or, in the case of state owned buildings, from the Director of the Virginia Department of General Services. The provisions of this section shall not apply to any dormitory at a state supported military college or university that is patrolled 24 hours a day by military guards.

#### D. Add Section 1701.3 to the IEBC to read:

1701.3 Smoke detectors in certain juvenile care facilities. In accordance with § 36 99.4 of the Code of Virginia, battery powered or AC powered smoke detectors shall be installed in all local and regional detention homes, group homes, and other residential care facilities for children and juveniles that are operated by or under the auspices of the Virginia Department of Juvenile Justice, regardless of when the building was constructed, by July 1, 1986, in accordance with the provisions of this code that were in effect on July 1, 1984. Administrators of such homes and facilities shall be responsible for the installation of the smoke detector devices.

#### E. Add Section 1701.4 to the IEBC to read:

1701.4 Smoke detectors for the deaf and hearing impaired. In accordance with § 36 99.5 of the Code of Virginia, smoke detectors providing an effective intensity of not less than 100 candela to warn a deaf or hearing impaired individual shall be provided, upon request by the occupant to the landlord or proprietor, to any deaf or hearing impaired occupant of any of the following occupancies, regardless of when constructed:

- 1. All dormitory buildings arranged for the shelter and sleeping accommodations of more than 20 individuals;
- 2. All multiple family dwellings having more than two dwelling units, including all dormitories and boarding and lodging houses arranged for shelter and sleeping accommodations of more than 5 individuals; or

3. All buildings arranged for use as one-family or two-family dwelling units.

A tenant shall be responsible for the maintenance and operation of the smoke detector in the tenant's unit.

A hotel or motel shall have available no fewer than one such smoke detector for each 70 units or portion thereof, except that this requirement shall not apply to any hotel or motel with fewer than 35 units. The proprietor of the hotel or motel shall post in a conspicuous place at the registration desk or counter a permanent sign stating the availability of smoke detectors for the hearing impaired. Visual detectors shall be provided for all meeting rooms for which an advance request has been made.

F. Add Sections 1701.5, 1701.5.1, and 1701.5.2 to the IEBC to read:

1701.5 Assisted living facilities (formerly known as adult care residences or homes for adults). Existing assisted living facilities licensed by the Virginia Department of Social Services shall comply with this section.

1701.5.1 Fire protective signaling system and fire detection system. A fire protective signaling system and an automatic fire detection system meeting the requirements of the USBC, Volume I, 1987 Edition, Third Amendment, shall be installed in assisted living facilities by August 1, 1994.

Exception: Assisted living facilities that are equipped throughout with a fire protective signaling system and an automatic fire detection system.

1701.5.2 Single station and multiple station smoke detectors. Battery or AC powered single station and multiple station smoke detectors meeting the requirements of the USBC, Volume I, 1987 Edition, Third Amendment, shall be installed in assisted living facilities by August 1, 1994.

Exception: Assisted living facilities that are equipped throughout with single station and multiple station smoke detectors.

### G. Add Section 1701.6 to the IEBC to read:

1701.6 Smoke detectors in buildings containing dwelling units. AC powered smoke detectors with battery backup or an equivalent device shall be required to be installed to replace a defective or inoperative battery powered smoke detector located in buildings containing one or more dwelling units or rooming houses offering to rent overnight sleeping accommodations when it is determined by the building official that the responsible party of such building or dwelling unit fails to maintain battery powered smoke detectors in working condition.

H. Add Section 1701.7 to the IEBC to read:

1701.7 Fire suppression, fire alarm, and fire detection systems in nursing homes and facilities. Fire suppression systems as required by the edition of this code in effect on October 1, 1990, shall be installed in all nursing facilities licensed by the Virginia Department of Health by January 1, 1993, regardless of when such facilities or institutions were constructed. Units consisting of certified long term care beds located on the ground floor of general hospitals shall be exempt from the requirements of this section.

Fire alarm or fire detector systems, or both, as required by the edition of this code in effect on October 1, 1990, shall be installed in all nursing homes and nursing facilities licensed by the Virginia Department of Health by August 1, 1994.

#### I. Add Section 1701.8 to the IEBC to read:

1701.8 Fire suppression systems in hospitals. Fire suppression systems shall be installed in all hospitals licensed by the Virginia Department of Health as required by the edition of this code in effect on October 1, 1995, regardless of when such facilities were constructed.

#### J. Add Section 1701.9 to the IEBC to read:

1701.9 Identification of disabled parking spaces by above grade signage. All parking spaces reserved for the use of persons with disabilities shall be identified by above grade signs, regardless of whether identification of such spaces by above grade signs was required when any particular space was reserved for the use of persons with disabilities. A sign or symbol painted or otherwise displayed on the pavement of a parking space shall not constitute an above grade sign. Any parking space not identified by an above grade sign shall not be a parking space reserved for the disabled within the meaning of this section. All above grade disabled parking space signs shall have the bottom edge of the sign no lower than 4 feet (1219 mm) nor higher than 7 feet (2133 mm) above the parking surface. Such signs shall be designed and constructed in accordance with the provisions of Chapter 11 of this code. All disabled parking signs shall include the following language: "PENALTY, \$100 500 Fine, TOW AWAY ZONE." Such language may be placed on a separate sign and attached below existing above grade disabled parking signs, provided that the bottom edge of the attached sign is no lower than 4 feet above the parking surface.

#### K. Add Section 1701.10 to the IEBC to read:

1701.10 Smoke detectors in hotels and motels. Smoke detectors shall be installed in hotels and motels as required by the edition of VR 394-01-22, USBC, Volume II, in effect on March 1, 1990, by the dates indicated, regardless of when constructed.

#### L. Add Section 1701.11 to the IEBC to read:

1701.11 Sprinkler systems in hotels and motels. By September 1, 1997, an automatic sprinkler system shall be installed in hotels and motels as required by the edition of VR 394 01 22, USBC, Volume II, in effect on March 1, 1990, regardless of when constructed.

#### M. Add Section 1701.12 to the IEBC to read:

1701.12 Fire suppression systems in dormitories. An automatic fire suppression system shall be provided throughout all buildings having a Group R 2 fire area that are more than 75 feet (22,860 mm) or 6 stories above the lowest level of exit discharge and are used, in whole or in part, as a dormitory to house students by any public or private institution of higher education, regardless of when such buildings were constructed, in accordance with the edition of this code in effect on August 20, 1997, and the requirements for sprinkler systems under the edition of the NFPA 13 standard referenced by that code. The automatic fire suppression system shall be installed by September 1, 1999. The chief administrative office of the college or university shall obtain a certificate of compliance from the building official of the locality in which the college or university is located or, in the case of state owned buildings, from the Director of the Virginia Department of General Services.

- 1. Buildings equipped with an automatic fire suppression system in accordance with Section 903.3.1.1 of the 1983 or later editions of NFPA 13.
- 2. Any dormitory at a state supported military college or university that is patrolled 24 hours a day by military guards.
- 3. Application of the requirements of this section shall be modified in accordance with the following:
- 3.1. Building systems, equipment, or components other than the fire suppression system shall not be required to be added or upgraded except as necessary for the installation of the fire suppression system and shall only be required to be added or upgraded where the installation of the fire suppression system creates an unsafe condition.
- 3.2. Residential sprinklers shall be used in all sleeping rooms. Other sprinklers shall be quick response or residential unless deemed unsuitable for a space. Standard response sprinklers shall be used in elevator hoistways and machine rooms.
- 3.3. Sprinklers shall not be required in wardrobes in sleeping rooms that are considered part of the building construction or in closets in sleeping rooms when such wardrobes or closets (i) do not exceed 24 square feet

(2.23 m<sup>2</sup>) in area, (ii) have the smallest dimension less than 36 inches (914 mm), and (iii) comply with all of the following:

3.3.1. A single station smoke detector monitored by the building fire alarm system is installed in the room containing the wardrobe or closet that will activate the general alarm for the building if the single station smoke detector is not cleared within five minutes after activation.

3.3.2. The minimum number of sprinklers required for calculating the hydraulic demand of the system for the room shall be increased by two and the two additional sprinklers shall be corridor sprinklers where the wardrobe or closet is used to divide the room. Rooms divided by a wardrobe or closet shall be considered one room for the purpose of this requirement.

3.3.3. The ceiling of the wardrobe, closet, or room shall have a fire resistance rating of not less than 1/2 hour.

3.4. Not more than one sprinkler shall be required in bathrooms within sleeping rooms or suites having a floor area between 55 square feet (5.12 m²) and 120 square feet (11.16 m²), provided the sprinkler is located to protect the lavatory area and the plumbing fixtures are of a noncombustible material.

3.5. Existing standpipe residual pressure shall be permitted to be reduced when the standpipe serves as the water supply for the fire suppression system, provided the water supply requirements of NFPA 13 94 are met.

3.6. Limited service controllers shall be permitted for fire pumps when used in accordance with their listing.

3.7. Where a standby power system is required, a source of power in accordance with Section 701-11 (d) or 701-11 (e) of NFPA 70-96 shall be permitted.

#### N. Add Section 1701.13 to the IEBC to read:

1701.13 Fire extinguishers and smoke detectors in SRCFs. SRCFs shall be provided with at least one approved type ABC portable fire extinguisher with a minimum rating of 2A10BC installed in each kitchen. In addition, SRCFs shall provide at least one approved and properly installed battery operated smoke detector outside of each sleeping area in the vicinity of bedrooms and bedroom hallways and on each additional floor.

#### O. Add Section 1701.14 to the IEBC to read:

1701.14 Smoke detectors in adult day care centers. Battery powered or AC powered smoke detector devices shall be installed in all adult day care centers licensed by the Virginia Department of Social Services, regardless of when the building was constructed. The location and installation of the smoke detectors shall be determined by the provisions of this code in effect on October 1, 1990.

The licensee shall obtain a certificate of compliance from the building official of the locality in which the center is located or, in the case of state owned buildings, from the Director of the Virginia Department of General Services.

#### P. Add Section 1701.15 to the IEBC to read:

1701.15 Posting of occupant load. Every room or space that is an assembly occupancy, and where the occupant load of that room or space is 50 or more, shall have the occupant load of the room or space as determined by the building official posted in a conspicuous place, near the main exit or exit access doorway from the room or space. Posted signs shall be of an approved legible permanent design and shall be maintained by the owner or owner's authorized agent.

#### Q. Add Section 1701.16 to the IEBC to read:

1701.16 ALFSTs. Existing ALFSTs, regardless of when constructed, shall by October 1, 2011, meet the applicable requirements of API 653 and TFI RMIP for suitability for service and inspections and shall provide a secondary containment system complying with Section 425.3 of the VCC.

#### R. Add Section 1701.17 to the IEBC to read:

1701.17 Standards for replacement glass. In accordance with § 36 99.2 of the Code of Virginia, any replacement glass installed in buildings constructed prior to the first edition of the USBC shall meet the quality and installation standards for glass installed in new buildings as are in effect at the time of installation. In addition, as a requirement of this code, the installation or replacement of glass in buildings constructed under any edition of the USBC shall be as required for new installations.

#### Part III Maintenance

# 13VAC5-63-450. Chapter 1 Administration; Section 101 General.

A. Section 101.1 Short title. The Virginia Uniform Statewide Building Code, Part III, Maintenance, may be cited as the "Virginia Maintenance Code," or as the "VMC."

B. Section 101.2 Incorporation by reference. Chapters 2 - 8 of the 2015 2018 International Property Maintenance Code, published by the International Code Council, Inc., are adopted and incorporated by reference to be an enforceable part of the VMC. The term "IPMC" means the 2015 2018 International Property Maintenance Code, published by the International Code Council, Inc. Any codes and standards referenced in the IPMC are also considered to be part of the incorporation by reference, except that such codes and standards are used only to the prescribed extent of each such reference.

C. Section 101.3 Numbering system. A dual numbering system is used in the VMC to correlate the numbering system

of the Virginia Administrative Code with the numbering system of the IPMC. IPMC numbering system designations are provided in the catchlines of the Virginia Administrative Code sections and cross references between sections or chapters of the Virginia Maintenance Code use only the IPMC numbering system designations. The term "chapter" is used in the context of the numbering system of the IPMC and may mean a chapter in the VMC, a chapter in the IPMC or a chapter in a referenced code or standard, depending on the context of the use of the term. The term "chapter" is not used to designate a chapter of the Virginia Administrative Code, unless clearly indicated.

- D. Section 101.4 Arrangement of code provisions. The VMC is comprised of the combination of (i) the provisions of Chapter 1, Administration, which are established herein, (ii) Chapters 2 8 of the IPMC, which are incorporated by reference in Section 101.2, and (iii) the changes to the text of the incorporated chapters of the IPMC which are specifically identified. The terminology "changes to the text of the incorporated chapters of the IPMC which are specifically identified" shall also be referred to as the "state amendments to the IPMC." Such state amendments to the IPMC are set out using corresponding chapter and section numbers of the IPMC numbering system.
- E. Section 101.5 Use of terminology and notes. The term "this code," or "the code," where used in the provisions of Chapter 1, in Chapters 2 - 8 of the IPMC, or in the state amendments to the IPMC, means the VMC, unless the context clearly indicates otherwise. The term "this code," or "the code," where used in a code or standard referenced in the IPMC, means that code or standard, unless the context clearly indicates otherwise. The term "USBC" where used in this code means the VCC unless the context clearly indicates otherwise. In addition, the use of notes in Chapter 1 is to provide information only and shall not be construed as changing the meaning of any code provision. Notes in the IPMC, in the codes and standards referenced in the IPMC, and in the state amendments to the IPMC, may modify the content of a related provision and shall be considered to be a valid part of the provision, unless the context clearly indicates otherwise.
- F. Section 101.6 Order of precedence. The provisions of this code shall be used as follows:
  - 1. The provisions of Chapter 1 of this code supersede any provisions of Chapters 2 8 of the IPMC that address the same subject matter and impose differing requirements.
  - 2. The provisions of Chapter 1 of this code supersede any provisions of the codes and standards referenced in the IPMC that address the same subject matter and impose differing requirements.

- 3. The state amendments to the IPMC supersede any provisions of Chapters 2 8 of the IPMC that address the same subject matter and impose differing requirements.
- 4. The state amendments to the IPMC supersede any provisions of the codes and standards referenced in the IPMC that address the same subject matter and impose differing requirements.
- 5. The provisions of Chapters 2 8 of the IPMC supersede any provisions of the codes and standards referenced in the IPMC that address the same subject matter and impose differing requirements.
- G. Section 101.7 Definitions. The definitions of terms used in this code are contained in Chapter 2 along with specific provisions addressing the use of definitions. Terms may be defined in other chapters or provisions of the code and such definitions are also valid.

## 13VAC5-63-470. Section 103 Application of code.

- A. Section 103.1 General. This code prescribes regulations for the maintenance of all existing buildings and structures and associated equipment, including regulations for unsafe buildings and structures.
- B. Section 103.2 Maintenance requirements. Buildings, structures and systems shall be maintained and kept in good repair in accordance with the requirements of this code and when applicable in accordance with the USBC under which such building or structure was constructed. No provision of this code shall require alterations to be made to an existing building or structure or to equipment unless conditions are present which meet the definition of an unsafe structure or a structure unfit for human occupancy.
- C. 103.2.1 Maintenance of nonrequired components and systems. Nonrequired components and systems may be discontinued in use provided that no hazard results from such discontinuance of use.
- D. 103.2.2 Maintenance of nonrequired fire protection systems. Nonrequired fire protection systems shall be maintained to function as originally installed. If any such systems are to be reduced in function or discontinued, approval shall be obtained from the building official in accordance with Section 103.8.1 103.3.1 of the VCC.
- E. 103.2.3 Responsibility. The owner of a structure shall provide and maintain all buildings, structures, systems, facilities and associated equipment in compliance with this code unless it is specifically expressed or implied that it is the responsibility of the tenant or occupant.

Note: Where an owner states that a tenant is responsible for performing any of the owner's duties under this code, the code official may request information needed to verify the owner's statement, as allowed by § 55-1-1209 A 5 of the Code of Virginia.

F. Section 103.3 Continued approval. Notwithstanding any provision of this code to the contrary, alterations shall not be required to be made to existing buildings or structures which are occupied in accordance with a certificate of occupancy issued under any edition of the USBC.

G. Section 103.4 Rental Inspections. In accordance with § 36-105.1:1 of the Code of Virginia, these provisions are applicable to rental inspection programs. For purposes of this section:

"Dwelling unit" means a building or structure or part thereof that is used for a home or residence by one or more persons who maintain a household.

"Owner" means the person shown on the current real estate assessment books or current real estate assessment records.

"Residential rental dwelling unit" means a dwelling unit that is leased or rented to one or more tenants. However, a dwelling unit occupied in part by the owner thereof shall not be construed to be a residential rental dwelling unit unless a tenant occupies a part of the dwelling unit that has its own cooking and sleeping areas, and a bathroom, unless otherwise provided in the zoning ordinance by the local governing body.

The local governing body may adopt an ordinance to inspect residential rental dwelling units for compliance with this code and to promote safe, decent and sanitary housing for its citizens, in accordance with the following:

- 1. Except as provided for in subdivision 3 of this subsection, the dwelling units shall be located in a rental inspection district established by the local governing body in accordance with this section; and
- 2. The rental inspection district is based upon a finding by the local governing body that (i) there is a need to protect the public health, safety and welfare of the occupants of dwelling units inside the designated rental inspection district; (ii) the residential rental dwelling units within the designated rental inspection district are either (a) blighted or in the process of deteriorating or (b) the residential rental dwelling units are in the need of inspection by the building department to prevent deterioration, taking into account the number, age and condition of residential dwelling rental units inside the proposed rental inspection district; and (iii) the inspection of residential rental dwelling units inside the proposed rental inspection district is necessary to maintain safe, decent and sanitary living conditions for tenants and other residents living in the proposed rental inspection district. Nothing in this section shall be construed to authorize one or more locality-wide rental inspection districts and a local governing body shall limit the boundaries of the proposed rental inspection districts to such areas of the locality that meet the criteria set out in this subsection; or

3. An individual residential rental dwelling unit outside of a designated rental inspection district is made subject to the rental inspection ordinance based upon a separate finding for each individual dwelling unit by the local governing body that (i) there is a need to protect the public health, welfare and safety of the occupants of that individual dwelling unit; (ii) the individual dwelling unit is either (a) blighted or (b) in the process of deteriorating; or (iii) there is evidence of violations of this code that affect the safe, decent and sanitary living conditions for tenants living in such individual dwelling unit.

For purposes of this section, the local governing body may designate a local government agency other than the building department to perform all or part of the duties contained in the enforcement authority granted to the building department by this section.

Before adopting a rental inspection ordinance and establishing a rental inspection district or an amendment to either, the governing body of the locality shall hold a public hearing on the proposed ordinance. Notice of the hearing shall be published once a week for two successive weeks in a newspaper published or having general circulation in the locality.

Upon adoption by the local governing body of a rental inspection ordinance, the building department shall make reasonable efforts to notify owners of residential rental dwelling units in the designated rental inspection district, or their designated managing agents, and to any individual dwelling units subject to the rental inspection ordinance, not located in a rental inspection district, of the adoption of such ordinance, and provide information and an explanation of the rental inspection ordinance and the responsibilities of the owner thereunder.

The rental inspection ordinance may include a provision that requires the owners of dwelling units in a rental inspection district to notify the building department in writing if the dwelling unit of the owner is used for residential rental purposes. The building department may develop a form for such purposes. The rental inspection ordinance shall not include a registration requirement or a fee of any kind associated with the written notification pursuant to this subdivision. A rental inspection ordinance may not require that the written notification from the owner of a dwelling unit subject to a rental inspection ordinance be provided to the building department in less than 60 days after the adoption of a rental inspection ordinance. However, there shall be no penalty for the failure of an owner of a residential rental dwelling unit to comply with the provisions of this subsection, unless and until the building department provides personal or written notice to the property owner, as provided in this section. In any event, the sole penalty for the willful failure of an owner of a dwelling unit who is using the dwelling unit for residential rental purposes to comply with

the written notification requirement shall be a civil penalty of up to \$50. For purposes of this subsection, notice sent by regular first-class mail to the last known address of the owner as shown on the current real estate tax assessment books or current real estate tax assessment records shall be deemed compliance with this requirement.

Upon establishment of a rental inspection district in accordance with this section, the building department may, in conjunction with the written notifications as provided for above, proceed to inspect dwelling units in the designated rental inspection district to determine if the dwelling units are being used as a residential rental property and for compliance with the provisions of this code that affect the safe, decent and sanitary living conditions for the tenants of such property.

If a multifamily development has more than 10 dwelling units, in the initial and periodic inspections, the building department shall inspect only a sampling of dwelling units, of not less than two and not more than 10% of the dwelling units, of a multifamily development, that includes all of the multifamily buildings that are part of that multifamily development. In no event, however, shall the building department charge a fee authorized by this section for inspection of more than 10 dwelling units. If the building department determines upon inspection of the sampling of dwelling units that there are violations of this code that affect the safe, decent and sanitary living conditions for the tenants of such multifamily development, the building department may inspect as many dwelling units as necessary to enforce these provisions, in which case, the fee shall be based upon a charge per dwelling unit inspected, as otherwise provided in the fee schedule established pursuant to this section.

Upon the initial or periodic inspection of a residential rental dwelling unit subject to a rental inspection ordinance, the building department has the authority under these provisions to require the owner of the dwelling unit to submit to such follow-up inspections of the dwelling unit as the building department deems necessary, until such time as the dwelling unit is brought into compliance with the provisions of this code that affect the safe, decent and sanitary living conditions for the tenants.

Except as provided for above, following the initial inspection of a residential rental dwelling unit subject to a rental inspection ordinance, the building department may inspect any residential rental dwelling unit in a rental inspection district, that is not otherwise exempted in accordance with this section, no more than once each calendar year.

Upon the initial or periodic inspection of a residential rental dwelling unit subject to a rental inspection ordinance for compliance with these provisions, provided that there are no violations of this code that affect the safe, decent and sanitary living conditions for the tenants of such residential rental dwelling unit, the building department shall provide, to the owner of such residential rental dwelling unit, an exemption from the rental inspection ordinance for a minimum of four years. Upon the sale of a residential rental dwelling unit, the building department may perform a periodic inspection as provided above, subsequent to such sale. If a residential rental dwelling unit has been issued a certificate of occupancy within the last four years, an exemption shall be granted for a minimum period of four years from the date of the issuance of the certificate of occupancy by the building department. If the residential rental dwelling unit becomes in violation of this code during the exemption period, the building department may revoke the exemption previously granted under this section.

A local governing body may establish a fee schedule for enforcement of these provisions, which includes a per dwelling unit fee for the initial inspections, follow-up inspections and periodic inspections under this section.

The provisions of this section shall not in any way alter the rights and obligations of landlords and tenants pursuant to the applicable provisions of Chapter 13 (§ 55-217 et seq.) or Chapter 13.2 (§ 55-248.2 et seq.) of Title 55 of the Code of Virginia.

The provisions of this section shall not alter the duties or responsibilities of the local building department under § 36-105 of the Code of Virginia to enforce the USBC.

Unless otherwise provided for in § 36-105.1:1 of the Code of Virginia, penalties for violation of this section shall be the same as the penalties provided for violations of other sections of the USBC.

#### 13VAC5-63-480. Section 104 Enforcement, generally.

A. Section 104.1 Scope of enforcement. This section establishes the requirements for enforcement of this code in accordance with subdivision C 1 of § 36-105 of the Code of Virginia. The local governing body may also inspect and enforce the provisions of the USBC for existing buildings and structures, whether occupied or not. Such inspection and enforcement shall be carried out by an agency or department designated by the local governing body.

In accordance with subdivision C 3 of § 36-105 of the Code of Virginia, if the local building department receives a complaint that a violation of this code exists that is an immediate and imminent threat to the health or safety of the owner, tenant, or occupants of any building or structure, or the owner, occupant, or tenant of any nearby building or structure, and the owner, occupant, or tenant of the building or structure that is the subject of the complaint has refused to allow the code official or his agent to have access to the subject building or structure, the code official or his agent may make an affidavit under oath before a magistrate or a court of competent jurisdiction and request that the magistrate or court grant the code official or his agent an inspection warrant to enable the code official or his agent to enter the

subject building or structure for the purpose of determining whether violations of this code exist. After issuing a warrant under this section, the magistrate or judge shall file the affidavit in a manner prescribed by § 19.2-54 of the Code of Virginia. After executing the warrant, the code official or his agents shall return the warrant to the clerk of the circuit court of the city or county wherein the inspection was made. The code official or his agent shall make a reasonable effort to obtain consent from the owner, occupant, or tenant of the subject building or structure prior to seeking the issuance of an inspection warrant under this section.

Note: Generally, official action must be taken by the local government to enforce the VMC. Consultation with the legal counsel of the jurisdiction when initiating or changing such action is advised.

- B. Section 104.1.1 Transfer of ownership. In accordance with subdivision C 4 of § 36-105 of the Code of Virginia, if the local building department has initiated an enforcement action against the owner of a building or structure and such owner subsequently transfers the ownership of the building or structure to an entity in which the owner holds an ownership interest greater than 50%, the pending enforcement action shall continue to be enforced against the owner.
- C. Section 104.2 Fees. In accordance with subdivision C 7 of § 36-105 of the Code of Virginia, fees may be levied by the local governing body in order to defray the cost of enforcement and appeals. For the purposes of this section, "defray the cost" may include the fair and reasonable costs incurred for such enforcement during normal business hours, but shall not include overtime costs unless conducted outside of the normal working hours established by the locality. A schedule of such costs shall be adopted by the local governing body in a local ordinance. A locality shall not charge overtime rate for inspections conducted during the normal business hours established by the locality. Nothing in this provision shall be construed to prohibit a private entity from conducting such inspections, provided the private entity has been approved to perform such inspections in accordance with the written policy of the code official for the locality.
- D. Section 104.3 State buildings. In accordance with § 36-98.1 of the Code of Virginia, this code shall be applicable to state-owned buildings and structures. Acting through the Division of Engineering and Buildings, the Department of General Services shall function as the building official for state-owned buildings.
- E. Section 104.3.1 Certification of state enforcement personnel. State enforcement personnel shall comply with the applicable requirements of Sections 104.4.2 and 104.4.3 for certification.

Note: Continuing education and periodic training requirements for DHCD certifications are set out in the VCS.

F. Section 104.4 Local enforcing agency. In jurisdictions enforcing this code, the local governing body shall designate the agency within the local government responsible for such enforcement and appoint a code official. The local governing body may also utilize technical assistants to assist the code official in the enforcement of this code. A permanently appointed code official shall not be removed from office except for cause after having been afforded a full opportunity to be heard on specific and relevant charges by and before the appointing authority. DHCD shall be notified by the appointing authority within 30 days of the appointment or release of a permanent or acting code official and within 60 days after retaining or terminating a technical assistant.

Note: Code officials and technical assistants are subject to sanctions in accordance with the VCS.

G. Section 104.4.1 Qualifications of code official and technical assistants. The code official shall have at least five years of building experience as a licensed professional engineer or architect, building, fire or trade inspector, contractor, housing inspector or superintendent of building, fire or trade construction or at least five years of building experience after obtaining a degree in architecture or engineering, with at least three years in responsible charge of work. Any combination of education and experience that would confer equivalent knowledge and ability shall be deemed to satisfy this requirement. The code official shall have general knowledge of sound engineering practice in respect to the design and construction of structures, the basic principles of fire prevention, the accepted requirements for means of egress and the installation of elevators and other service equipment necessary for the health, safety and general welfare of the occupants and the public. The local governing body may establish additional qualification requirements.

A technical assistant shall have at least three years of experience and general knowledge in at least one of the following areas: building construction, building, fire or housing inspections, plumbing, electrical or mechanical trades, fire protection, elevators or property maintenance work. Any combination of education and experience which would confer equivalent knowledge and ability shall be deemed to satisfy this requirement. The locality may establish additional certification requirements.

H. Section 104.4.2 Certification of code official and technical assistants. An acting or permanent code official shall be certified as a code official in accordance with the VCS within one year after being appointed as acting or permanent code official. A technical assistant shall be certified in the appropriate subject area within 18 months after becoming a technical assistant. When required by a locality to have two or more certifications, a technical assistant shall obtain the additional certifications within three years from the date of such requirement.

Exception: A code official or technical assistant in place prior to April 1, 1995, shall not be required to meet the certification requirements in this section while continuing to serve in the same capacity in the same locality.

I. Section 104.4.3 Noncertified code official. Except for a code official exempt from certification under the exception to Section 104.4.2, any acting or permanent code official who is not certified as a code official in accordance with the VCS shall attend the core module of the Virginia Building Code Academy or an equivalent course in an individual or regional code academy accredited by DHCD within 180 days of appointment. This requirement is in addition to meeting the certification requirement in Section 104.4.2.

Note: Continuing education and periodic training requirements for DHCD certifications are set out in the VCS.

- J. Section 104.4.4 Conflict of interest. The standards of conduct for code officials and technical assistants shall be in accordance with the provisions of the State and Local Government Conflict of Interests Act, Chapter 31 (§ 2.2-3100 et seq.) of Title 2.2 of the Code of Virginia.
- K. Section 104.4.5 Records. The local enforcing agency shall retain a record of applications received, permits, certificates, notices and orders issued, fees collected and reports of inspections in accordance with The Library of Virginia's General Schedule Number Six.
- L. Section 104.5 Powers and duties, generally. The code official shall enforce this code as set out herein and as interpreted by the State Review Board and shall issue all necessary notices or orders to ensure compliance with the code.
- M. Section 104.5.1 Delegation of authority. The code official may delegate powers and duties except where such authority is limited by the local government. When such delegations are made, the code official shall be responsible for assuring that they are carried out in accordance with the provisions of this code.
- N. Section 104.5.2 Issuance of modifications. Upon written application by an owner or an owner's agent, the code official may approve a modification of any provision of this code provided the spirit and intent of the code are observed and public health, welfare and safety are assured. The decision of the code official concerning a modification shall be made in writing and the application for a modification and the decision of the code official concerning such modification shall be retained in the permanent records of the local enforcing agency.
- O. Section 104.5.2.1 Substantiation of modification. The code official may require or may consider a statement from a professional engineer, architect or other person competent in the subject area of the application as to the equivalency of the proposed modification.

- P. Section 104.5.3 Inspections. The code official may inspect buildings or structures to determine compliance with this code and shall carry proper credentials when performing such inspections. The code official is authorized to engage such expert opinion as deemed necessary to report upon unusual, detailed, or complex technical issues in accordance with local policies.
- Q. Section 104.5.3.1 Observations. When, during an inspection, the code official or authorized representative observes an apparent or actual violation of another law, ordinance, or code not within the official's authority to enforce, such official shall report the findings to the official having jurisdiction in order that such official may institute the necessary measures.
- R. Section 104.5.3.2 Approved inspection agencies and individuals. The code official may accept reports of inspections or tests from individuals or inspection agencies approved in accordance with the code official's written policy required by Section 104.5.3.3. The individual or inspection agency shall meet the qualifications and reliability requirements established by the written policy. Reports of inspections by approved individuals or agencies shall be in writing, shall indicate if compliance with the applicable provisions of this code have been met, and shall be certified by the individual inspector or by the responsible officer when the report is from an agency. Reports of inspections conducted for the purpose of verifying compliance with the requirements of the USBC for elevators, escalators, and related conveyances shall include the name and certification number of the elevator mechanic performing the tests witnessed by the third-party inspector or agency. The code official shall review and approve the report unless there is cause to reject it. Failure to approve a report shall be in writing within five working days of receiving it, stating the reasons for rejection.
- S. Section 104.5.3.3 Third-party inspectors. Each code official charged with the enforcement of this code and who accepts third-party reports shall have a written policy establishing the minimum acceptable qualifications for third-party inspectors. The policy shall include the format and time frame required for submission of reports, any prequalification or preapproval requirements before conducting a third-party inspection, and any other requirements and procedures established by the code official.
- T. Section 104.5.3.4 Qualifications. In determining third-party qualifications, the code official may consider such items as DHCD inspector certification, other state or national certifications, state professional registrations, related experience, education, and any other factors that would demonstrate competency and reliability to conduct inspections.
- U. 104.5.4 Manufactured home park tenant notification. If a notice of violation is issued to a manufactured home park

owner for violations of this code that jeopardize the health or safety of tenants of the park, a copy of the notice shall be provided to each affected tenant of the manufactured home park. The terms, "manufactured home park" and "owner," as used in this section, shall be as defined in the Manufactured Home Lot Rental Act (Chapter 13.3 (§ 55-248.41 et seq.) of Title 55 of the Code of Virginia).

# 13VAC5-63-490. Section 106 Unsafe structures or structures unfit for human occupancy.

A. Section 106.1 General. This section shall apply to existing structures which are classified as unsafe or unfit for human occupancy. All conditions causing such structures to be classified as unsafe or unfit for human occupancy shall be remedied or as an alternative to correcting such conditions, the structure may be vacated and secured against public entry or razed and removed. Vacant and secured structures shall still be subject to other applicable requirements of this code. Notwithstanding the above, when the code official determines that an unsafe structure or a structure unfit for human occupancy constitutes such a hazard that it should be razed or removed, then the code official shall be permitted to order the demolition of such structures in accordance with applicable requirements of this code.

Note: Structures which become unsafe during construction are regulated under the VCC.

- B. Section 106.2 Inspection of unsafe or unfit structures. The code official shall inspect any structure reported or discovered as unsafe or unfit for human habitation and shall prepare a report to be filed in the records of the local enforcing agency and a copy issued to the owner. The report shall include the use of the structure and a description of the nature and extent of any conditions found.
- C. Section 106.3 Unsafe conditions not related to maintenance. When the code official finds a condition that constitutes a serious and dangerous hazard to life or health in a structure constructed prior to the initial edition of the USBC and when that condition is of a cause other than improper maintenance or failure to comply with state or local building codes that were in effect when the structure was constructed, then the code official shall be permitted to order those minimum changes to the design or construction of the structure to remedy the condition.
- D. Section 106.3.1 Limitation to requirements for retrofitting. In accordance with Section 103.2, this code does not generally provide for requiring the retrofitting of any structure. However, conditions may exist in structures constructed prior to the initial edition of the USBC because of faulty design or equipment that constitute a danger to life or health or a serious hazard. Any changes to the design or construction required by the code official under this section shall be only to remedy the serious hazard or danger to life or health and such changes shall not be required to fully comply

with the requirements of the VCC applicable to newly constructed buildings or structures.

E. C. Section 106.4 106.3 Notice of unsafe structure or structure unfit for human occupancy. When a structure is determined to be unsafe or unfit for human occupancy by the code official, a written notice of unsafe structure or structure unfit for human occupancy shall be issued by personal service to the owner, the owner's agent or the person in control of such structure. The notice shall specify the corrections necessary to comply with this code, or if the structure is required to be demolished, the notice shall specify the time period within which the demolition must occur. Requirements in Section 105.2 for notices of violation are also applicable to notices issued under this section to the extent that any such requirements are not in conflict with the requirements of this section.

Note: Whenever possible, the notice should also be given to any tenants of the affected structure.

- F. D. Section 106.4.1 106.3.1 Vacating unsafe structure. If the code official determines there is actual and immediate danger to the occupants or public, or when life is endangered by the occupancy of an unsafe structure, the code official shall be authorized to order the occupants to immediately vacate the unsafe structure. When an unsafe structure is ordered to be vacated, the code official shall post a notice with the following wording at each entrance: "THIS STRUCTURE IS UNSAFE AND ITS OCCUPANCY (OR USE) IS PROHIBITED BY THE CODE OFFICIAL." After posting, occupancy or use of the unsafe structure shall be prohibited except when authorized to enter to conduct inspections, make required repairs or as necessary to demolish the structure.
- G. E. Section 106.5 106.4 Posting of notice. If the notice is unable to be issued by personal service as required by Section 106.4 106.3, then the notice shall be sent by registered or certified mail to the last known address of the responsible party and a copy of the notice shall be posted in a conspicuous place on the premises.
- H. F. Section 106.6 106.5 Posting of placard. In the case of a structure unfit for human habitation, at the time the notice is issued, a placard with the following wording shall be posted at the entrance to the structure: "THIS STRUCTURE IS UNFIT FOR HABITATION AND ITS USE OR OCCUPANCY HAS BEEN PROHIBITED BY THE CODE OFFICIAL." In the case of an unsafe structure, if the notice is not complied with, a placard with the above wording shall be posted at the entrance to the structure. After a structure is placarded, entering the structure shall be prohibited except as authorized by the code official to make inspections, to perform required repairs or to demolish the structure. In addition, the placard shall not be removed until the structure is determined by the code official to be safe to occupy, nor shall the placard be defaced.

I. G. Section 106.7 106.6 Revocation of certificate of occupancy. If a notice of unsafe structure or structure unfit for human habitation is not complied with within the time period stipulated on the notice, the code official shall be permitted to request the local building department to revoke the certificate of occupancy issued under the VCC.

J. H. Section 106.8 106.7 Vacant and open structures. When an unsafe structure or a structure unfit for human habitation is open for public entry at the time a placard is issued under Section 106.6 106.5, the code official shall be permitted to authorize the necessary work to make such structure secure against public entry whether or not legal action to compel compliance has been instituted.

K. I. Section 106.9 106.8 Emergency repairs and demolition. To the extent permitted by the locality, the code official may authorize emergency repairs to unsafe structures or structures unfit for human habitation when it is determined that there is an imminent danger of any portion of the unsafe structure or structure unfit for human habitation collapsing or falling and when life is endangered. Emergency repairs may also be authorized where there is a code violation resulting in the immediate serious and imminent threat to the life and safety of the occupants. The code official shall be permitted to authorize the necessary work to make the structure temporarily safe whether or not legal action to compel compliance has been instituted. In addition, whenever an owner of an unsafe structure or structure unfit for human habitation fails to comply with a notice to demolish issued under Section 106.4 106.3 in the time period stipulated, the code official shall be permitted to cause the structure to be demolished. In accordance with §§ 15.2-906 and 15.2-1115 of the Code of Virginia, the legal counsel of the locality may be requested to institute appropriate action against the property owner to recover the costs associated with any such emergency repairs or demolition and every such charge that remains unpaid shall constitute a lien against the property on which the emergency repairs or demolition were made and shall be enforceable in the same manner as provided in Articles 3 (§ 58.1-3940 et seq.) and 4 (§ 58.1-3965 et seq.) of Chapter 39 of Title 58.1 of the Code of Virginia.

Note: Code officials and local governing bodies should be aware that other statutes and court decisions may impact on matters relating to demolition, in particular whether newspaper publication is required if the owner cannot be located and whether the demolition order must be delayed until the owner has been given the opportunity for a hearing. In addition, historic building demolition may be prevented by authority granted to local historic review boards in accordance with § 15.2-2306 of the Code of Virginia unless determined necessary by the code official.

L. J. Section 106.10 106.9 Closing of streets. When necessary for public safety, the code official shall be permitted to order the temporary closing of sidewalks, streets,

public ways or premises adjacent to unsafe or unfit structures and prohibit the use of such spaces.

### 13VAC5-63-510. Chapter 2 Definitions.

A. Change Section 201.3 of the IPMC to read:

201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the IBC, IFC, IFGC, IPC, IMC, International Existing Building Code, IRC, International Zoning Code or NFPA 70, such terms shall have the meanings ascribed to them as stated in those codes, except that terms defined in the VCC shall be used for this code and shall take precedence over other definitions.

B. Change Section 201.5 of the IPMC to read:

201.5 Parts. Whenever the words "dwelling unit," "dwelling," "premises," "building," "rooming unit," "housekeeping unit," or "story" are stated in this code, they shall be construed as though they were followed by the words "or part thereof."

C. Add the following definitions to Section 202 of the IPMC to read:

Applicable building code. The local or statewide building code and referenced standards in effect at the time the building or portion thereof was constructed, altered, renovated or underwent a change of occupancy. See Section 103 for the application of the code.

Maintained. To keep unimpaired in an appropriate condition, operation, and continuance as installed in accordance with the applicable building code, or as previously approved, and in accordance with the applicable operational and maintenance provisions of this code.

Structure unfit for human occupancy. An existing structure determined by the code official to be dangerous to the health, safety and welfare of the occupants of the structure or the public because (i) of the degree to which the structure is in disrepair or lacks maintenance, ventilation, illumination, sanitary or heating facilities or other essential equipment, or (ii) the required plumbing and sanitary facilities are inoperable.

Unsafe equipment. Unsafe equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or other equipment that is in such disrepair or condition that such equipment is determined by the code official to be dangerous to the health, safety and welfare of the occupants of a structure or the public.

Unsafe structure. An existing structure (i) determined by the code official to be dangerous to the health, safety and welfare of the occupants of the structure or the public, (ii) that contains unsafe equipment, or (iii) that is so damaged, decayed, dilapidated, structurally unsafe or of such faulty construction or unstable foundation that partial or complete collapse is likely. A vacant existing structure unsecured or open shall be deemed to be an unsafe structure.

D. Change the following definition in Section 202 of the IPMC to read:

<u>Infestation</u>. The presence of insects, rodents, vermin, or other pests in sufficient number to adversely affect the structure or health, safety, and welfare of the occupants.

<u>E.</u> Delete the following definitions from Section 202 of the IPMC:

Condemn

Cost of such demolition of emergency repairs

Equipment support

Inoperable motor vehicle

Labeled

Neglect

Openable area

Pest elimination

Strict liability offense

Ultimate deformation

Workmanlike

#### 13VAC5-63-520. Chapter 3 General requirements.

- A. Delete the following sections from Chapter 3 of the IPMC:
  - 1. Section 301.2 Responsibility.
  - 2. Section 302.1 Sanitation.
  - 3. Section 302.4 Weeds.
  - 4. Section 302.6 Exhaust vents.
  - 5. Section 302.8 Motor vehicles.
  - 6. Section 302.9 Defacement of property.
  - 7. Section 303.2 Enclosures.
  - 8. Section 304.1.1 Unsafe conditions.
  - 9. Section 304.18.1 Doors.
  - 10. Section 304.18.2 Windows.
  - 11. Section 304.18.3 Basement hatchways.
  - 12. Section 305.1.1 Unsafe conditions.
  - 13. Section 306 Component serviceability (all provisions).
  - 14. Section 308.2 Disposal of rubbish.
  - 15. Section 308.2.1 Rubbish storage facilities.

- 16. Section 308.2.2 Refrigerators.
- 17. Section 308.3 Disposal of garbage.
- 18. Section 308.3.1 Garbage facilities.
- 19. Section 308.3.2 Containers.
- 20. Section 309.2 Owner.
- 21. Section 309.3 Single occupant.
- 22. Section 309.4 Multiple occupancy.
- 23. Section 309.5 Occupant.
- B. Change the following sections in Chapter 3 of the IPMC to read:
  - 1. Section 301.1 Scope. The provisions of this chapter shall govern the minimum conditions for the maintenance of structures and equipment and for the maintenance of exterior property to the extent that this code is applicable.
  - 2. Section 301.3 Vacant structures. Vacant structures shall be maintained in a clean, safe, secure, and sanitary condition as provided for in this code.
  - 3. Section 302.2 Grading and drainage. All premises shall be graded and maintained to protect the foundation walls or slab of the structure from the accumulation and drainage of surface or stagnant water in accordance with the applicable building code.
  - 4. Section 302.3 Sidewalks and driveways. All sidewalks, walkways, stairs, driveways, parking spaces, and similar spaces regulated under the VCC shall be kept in a proper state of repair and maintained free from hazardous conditions.
  - 5. Section 302.5 Rodent harborage. All structures and adjacent premises shall be kept free from rodent harborage and infestation where such harborage or infestation adversely affects the structures. Structures in which rodents are found shall be promptly exterminated by approved processes that will not be injurious to human health. After extermination, proper precautions shall be taken to prevent reinfestation.
  - 6. Section 303.2 Enclosures. Swimming pool, hot tub, and spa barriers shall be maintained in accordance with the applicable building code or ordinance under which such barriers were constructed.
  - 7. Section 304.1 General. The exterior of a structure shall be maintained in good repair, structurally sound, and sanitary so as not to pose a threat to the health, safety, or welfare and structurally sound.
  - 8. Section 304.3 Premises identification. Address numbers of buildings shall be maintained in accordance with the applicable building code or when required by ordinance.

- 9. Section 304.7 Roofs and drainage. The roof and flashing shall be sound, tight, and not have defects that admit rain. Roof drainage shall be adequate to prevent dampness or deterioration in the walls or interior portion of the structure. Roof water shall be discharged in a manner to protect the foundation or slab of buildings and structures from the accumulation of roof drainage.
- 10. Section 304.14 Insect screens. During the period from April 1 to December 1, every door, window, and other outside opening required for ventilation of habitable rooms, food preparation areas, food service areas, or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged, or stored shall be supplied with an approved tightly fitting screens of not less than 16 mesh per inch (16 mesh per 25 mm) and every screen door used for insect control shall have a self-closing device in good working condition.

Exception: Screens shall not be required where other approved means, such as mechanical ventilation, air curtains, or insect repellant fans, are used.

- 11. Section 304.18 Building security. Devices designed to provide security for the occupants and property within, when required by the applicable building code or when provided, shall be maintained unless their removal is approved by the building official under the VCC.
- 12. Section 304.19 Gates. To the extent required by the applicable building code or to the extent provided when constructed, exterior gates, gate assemblies, operator systems if provided, and hardware shall be maintained in good condition. Latches at all entrances shall tightly secure the gates.
- 13. Section 305.1 General. The interior of a structure and equipment therein shall be maintained in good repair, structurally sound, and in a sanitary condition.
- 14. Section 307.1 General. Handrails and guards required or provided when a building was constructed shall be maintained in accordance with the applicable building code.
- 15. Section 308.1 Accumulation of rubbish or garbage. The interior of every structure shall be free from excessive accumulation of rubbish or garbage.
- 16. Section 309 Pest Infestation and extermination.
- 17. Section 309.1 Infestation. This section shall apply to the extent that insect and rodent infestation adversely affects a structure. All structures shall be kept free from insect and rodent infestation. Structures in which insects or rodents are found shall be promptly exterminated by approved processes that will not be injurious to human health. After extermination, proper precautions shall be taken to prevent reinfestation.

- C. Add the following sections to Chapter 3 of the IPMC:
- 1. Section 305.7 Carbon monoxide alarms. Carbon monoxide alarms shall be maintained as approved.
- 2. Section 310 Lead-based paint.
- 3. Section 310.1 General. Interior and exterior painted surfaces of dwellings and child care facilities, including fences and outbuildings, that contain lead levels equal to or greater than 1.0 milligram per square centimeter or in excess of 0.50% lead by weight shall be maintained in a condition free from peeling, chipping, and flaking paint or removed or covered in an approved manner. Any surface to be covered shall first be identified by an approved warning as to the lead content of such surface.
- 4. Section 311 Aboveground liquid fertilizer storage tanks (ALFST).
- 5. Section 311.1 General. ALFSTs shall be maintained in accordance with the requirements of Section 1101.16 of the VEBC and the requirements of the VCC applicable to such ALFSTs when newly constructed and the requirements of the VEBC when undergoing a change of occupancy to an ALFST and when repaired, altered, or reconstructed, including the requirements for inspections and for a secondary containment system.

# 13VAC5-63-530. Chapter 5 Plumbing facilities and fixture requirements.

- A. Change the title of Chapter 5 of the IPMC to "Plumbing Requirements."
- B. Delete the following sections from Chapter 5 of the IPMC:
  - 1. Section 501.2 Responsibility.
  - 2. Section 502 Required facilities (all provisions).
  - 3. Section 503 Toilet rooms (all provisions).
  - 4. Section 505.3 Supply.
  - 5. Section 505.5.1 Abandonment of systems.
- C. Change the following sections in Chapter 5 of the IPMC to read:
  - 1. Section 501.1 General. The provisions of this chapter shall govern the maintenance of structures for plumbing systems, facilities, and fixtures.
  - 2. Section 504.1 General. Required or provided plumbing systems and facilities shall be maintained in accordance with the applicable building code.
  - 3. Section 504.2 Plumbing fixtures. All plumbing fixtures shall be maintained in a safe, sanitary, and working condition. A kitchen sink shall not be used as a substitute for a required lavatory.

- 4. Section 504.3 Plumbing system hazards. Where it is found that a plumbing system in a structure constitutes a hazard to the public, the occupants, or the structure, the code official shall require the defects to be corrected to eliminate the hazard.
- 5. Section 505.1 Supply. Required or provided water supply systems shall be maintained in accordance with the applicable building code. All water supply systems shall be free from obstructions, defects, and leaks.
- 6. Section 505.2 Protection of water supply systems. Protection of water supply systems shall be provided and maintained in accordance with the applicable building code.
- 7. Section 505.3 Inspection and testing of backflow prevention systems. Inspection and testing shall comply with Sections 505.3.1 and 505.3.2.
- 8. Section 505.4 Water heating facilities. Water heating facilities shall be maintained. Combination temperature and pressure-relief valves and relief valve discharge pipes shall be maintained on water heaters.
- 9. Section 505.5 Nonpotable water reuse systems. Where installed, nonpotable water reuse and rainwater collection and conveyance systems shall be maintained in a safe and sanitary condition. Where such systems are not property maintained, the systems shall be repaired to provide for safe and sanitary conditions, or the system shall be abandoned in accordance with the following:
  - 1. All system piping connecting to a utility provided or private water system shall be removed or disabled. Proper cross-connection control and backwater prevention measures shall comply with the applicable building code.
  - 2. Where required, the distribution piping system shall be replaced with an approved potable water supply piping system.
  - 3. The storage tank shall be secured from accidental access by sealing or locking tank inlets and access points or filling with sand or equivalent.
- <u>10.</u> Section 506.1 Drainage and venting. Required or provided sanitary drainage and venting systems shall be maintained in accordance with the applicable building code.
- 40. 11. Section 506.2 Maintenance. Every building drainage and sewer system shall function properly and be kept free from obstructions, leaks, and defects.
- 41. 12. Section 507.1 General. Drainage of roofs and paved areas, yards and courts, and other open areas on the premises shall be discharged in a manner to protect the buildings and structures from the accumulation of overland water runoff.

- D. Add the following sections to Chapter 5 of the IPMC:
- 1. Section 504.1.1 Public and employee facilities. Except for periodic maintenance or cleaning, access and use shall be provided to facilities at all times during occupancy of the premises in accordance with the applicable building code.
- 2. Section 504.2.1 Fixture clearances. Adequate clearances for usage and cleaning of plumbing fixtures shall be maintained as approved when installed.
- 3. Section 505.1.1 Tempered water. Tempered water shall be supplied to fixtures and facilities when required by the applicable building code.
- 4. Section 505.2.1 Attached hoses. Shampoo basin faucets, janitor sink faucets, and other hose bibs or faucets to which hoses are attached and left in place shall be protected by an approved atmospheric-type vacuum breaker or an approved permanently attached hose connection vacuum breaker.
- 5. Section 505.3.1 Inspections. Inspections shall be made of all backflow assemblies and air gaps to determine whether they are operable.
- 6. Section 505.3.2 Testing. Reduced pressure principle backflow preventer assemblies, double check-valve assemblies, double-detector check valve assemblies, and pressure vacuum breaker assemblies shall be tested at the time of installation, immediately after repairs or relocation and at least annually. The testing procedure shall be performed in accordance with one of the following standards: ASSE 5010-1013-1, Sections 1 and 2; ASSE 5010-1015-1, Sections 1 and 2; ASSE 5010-1015-2; ASSE 5010-1015-3, Sections 1 and 2; ASSE 5010-1015-4, Sections 1 and 2; ASSE 5010-1020-1, Sections 1 and 2; ASSE 5010-1047-1, Sections 1, 2, 3 and 4; ASSE 5010-1048-2; ASSE 5010-1048-3, Sections 1, 2, 3 and 4; ASSE 5010-1048-4, Sections 1, 2, 3 and 4; or CAN/CSA B64.10.
- 7. 505.5 Nonpotable water reuse systems. Where installed, nonpotable water reuse and rainwater collection and conveyance systems shall be maintained in a safe and sanitary condition. Where such systems are not properly maintained, the systems shall be repaired to provide for safe and sanitary conditions, or the system shall be abandoned in accordance with the following:
  - 1. All system piping connecting to a utility provided or private water system shall be removed or disabled. Proper cross connection control and backflow prevention measures shall comply with the applicable building code.
- 2. Where required, the distribution piping system shall be replaced with an approved potable water supply piping system.

3. The storage tank shall be secured from accidental access by sealing or locking tank inlets and access points or filling with sand or equivalent.

# 13VAC5-63-540. Chapter 6 Mechanical and electrical requirements.

- A. Delete the following sections from Chapter 6 of the IPMC:
  - 1. Section 601.2 Responsibility.
  - 2. Section 603.6 Energy conservation devices.
  - 3. Section 604.2 Service.
  - 4. Section 604.3.2 Abatement of electrical hazards associated with fire exposure.
- B. Change the following sections in Chapter 6 of the IPMC to read:
  - 1. Section 601.1 General. The provisions of this chapter shall govern the maintenance of mechanical and electrical facilities and equipment.
  - 2. Section 602 Heating and cooling facilities.
  - 3. <u>Section 602.1 Facilities required. Heating and cooling facilities shall be maintained and operated in structures as required by this section.</u>
  - 4. Section 602.2 Heat supply. Every owner and operator of a Group R-2 apartment building or other residential building who rents, leases, or lets one or more dwelling unit, rooming unit, dormitory, or guestroom on terms, either expressed or implied, to furnish heat to the occupants thereof shall supply heat during the period from October 15 to May 1 to maintain a temperature of not less than 68°F (20°C) in all habitable rooms, bathrooms, and toilet rooms. The code official may also consider modifications as provided in Section 104.5.2 when requested for unusual circumstances or may issue notice approving building owners to convert shared heating and cooling piping HVAC systems 14 calendar days before or after the established dates when extended periods of unusual temperatures merit modifying these dates.

Exception: When the outdoor temperature is below the winter outdoor design temperature for the locality, maintenance of the minimum room temperature shall not be required provided that the heating system is operating at its full design capacity. The winter outdoor design temperature for the locality shall be as indicated in Appendix D of the IPC.

4. <u>5.</u> Section 602.3 Occupiable work spaces. Indoor occupiable work spaces shall be supplied with heat during the period from October 1 to May 15 to maintain a minimum temperature of 65°F (18°C) during the period the spaces are occupied.

#### **Exceptions:**

- 1. Processing, storage, and operation areas that require cooling or special temperature conditions.
- 2. Areas in which persons are primarily engaged in vigorous physical activities.
- 5. 6. Section 602.4 Cooling supply. Every owner and operator of a Group R-2 apartment building who rents, leases, or lets one or more dwelling units, rooming units, or guestrooms on terms, either expressed or implied, to furnish cooling to the occupants thereof shall supply cooling during the period from May 15 to October 1 to maintain a temperature of not more than 80°F (27°C) in all habitable rooms. The code official may also consider modifications as provided in Section 104.5.2 when requested for unusual circumstances or may issue notice approving building owners to convert shared heating and cooling piping HVAC systems 14 calendar days before or after the established dates when extended periods of unusual temperatures merit modifying these dates.

Exception: When the outdoor temperature is higher than the summer design temperature for the locality, maintenance of the room temperature shall not be required provided that the cooling system is operating at its full design capacity. The summer outdoor design temperature for the locality shall be as indicated in the IECC.

- 6. 7. Section 603.1 Mechanical equipment and appliances. Required or provided mechanical equipment, appliances, fireplaces, solid fuel-burning appliances, cooking appliances, chimneys, vents, and water heating appliances shall be maintained in compliance with the code under which the appliances, system, or equipment was installed, kept in safe working condition, and capable of performing the intended function.
- 7. 8. Section 603.2 Removal of combustion products. Where required by the code under which installed, fuel-burning equipment and appliances shall be connected to an approved chimney or vent.
- 8. 9. Section 603.5 Combustion air. Where required by the code under which installed, a supply of air for complete combustion of the fuel shall be provided for the fuel-burning equipment.
- 9. 10. Section 604.1 Electrical system. Required or provided electrical systems and facilities shall be maintained in accordance with the applicable building code.
- 40. 11. Section 604.3 Electrical system hazards. Where it is found that the electrical system in a structure constitutes a hazard to the occupants or the structure by reason of deterioration or damage or for similar reasons, the code official shall require the defects to be corrected to eliminate the hazard.

41. 12. Section 604.3.1.1 Electrical equipment. Electrical distribution equipment, motor circuits, power equipment, transformers, wire, cable, flexible cords, wiring devices, ground fault circuit interrupters, surge protectors, molded case circuit breakers, low-voltage fuses, luminaires, ballasts, motors, and electronic control, signaling, and communication equipment that have been exposed to water shall be replaced in accordance with the provisions of the VCC VEBC.

Exception: The following equipment shall be allowed to be repaired or reused where an inspection report from the equipment manufacturer, an approved representative of the equipment manufacturer, a third party licensed or certified electrician, or an electrical engineer indicates that the exposed equipment has not sustained damage that requires replacement:

- 1. Enclosed switches, rated 600 volts or less;
- 2. Busway, rated 600 volts or less;
- 3. Panelboards, rated 600 volts or less;
- 4. Switchboards, rated 600 volts or less;
- 5. Fire pump controllers, rated 600 volts or less;
- 6. Manual and magnetic motor controllers;
- 7. Motor control centers:
- 8. Alternating current high-voltage circuit breakers;
- 9. Low-voltage power circuit breakers;
- 10. Protective relays, meters, and current transformers;
- 11. Low-voltage and medium-voltage switchgear;
- 12. Liquid-filled transformers;
- 13. Cast-resin transformers:
- 14. Wire or cable that is suitable for wet locations and whose ends have not been exposed to water;
- 15. Wire or cable, not containing fillers, that is suitable for wet locations and whose ends have not been exposed to water;
- 16. Luminaires that are listed as submersible;
- 17. Motors: or
- 18. Electronic control, signaling, and communication equipment.
- 42. 13. 604.3.2.1 Electrical equipment. Electrical switches, receptacles and fixtures, including furnace, water heating, security system and power distribution circuits, that have been exposed to fire shall be replaced in accordance with the provisions of the Virginia Construction Code VEBC.

Exception: Electrical switches, receptacles and fixtures that shall be allowed to be repaired or reused where an

- inspection report from the equipment manufacturer or an approved representative of the equipment manufacturer, a third party licensed or certified electrician, or an electrical engineer indicates that the equipment has not sustained damage that requires replacement.
- 43. 14. Section 605.1 Electrical components. Electrical equipment, wiring, and appliances shall be maintained in accordance with the applicable building code.
- 14. 15. Section 605.2 Power distribution and receptacles. Required or provided power circuits and receptacles shall be maintained in accordance with the applicable building code, and ground fault and arc-fault circuit interrupter protection shall be provided where required by the applicable building code. All receptacle outlets shall have the appropriate faceplate cover for the location when required by the applicable building code.
- 15. 16. Section 605.3 Lighting distribution and luminaires. Required or provided lighting circuits and luminaires shall be maintained in accordance with the applicable building code.
- 16. 17. Section 605.4 Flexible cords. Flexible cords shall not be run through doors, windows, or cabinets or concealed within walls, floors, or ceilings.
- 17. 18. Section 606.1 General. Elevators, dumbwaiters, and escalators shall be maintained in compliance with ASME A17.1. The most current certificate of inspection shall be on display at all times within the elevator or attached to the escalator or dumbwaiter, be available for public inspection in the office of the building operator, or be posted in a publicly conspicuous location approved by the code official. Where not displayed in the elevator or attached on the escalator or dumbwaiter, there shall be a notice of where the certificate of inspection is available for inspection. An annual periodic inspection and test is required of elevators and escalators. A locality shall be permitted to require a six-month periodic inspection and test. All periodic inspections shall be performed in accordance with Section 8.11 of ASME A17.1. The code official may also provide for such inspection by an approved agency or through agreement with other local certified elevator inspectors. An approved agency includes any individual, partnership, or corporation who has met the certification requirements established by the VCS.
- C. Add the following sections to Chapter 6 of the IPMC:
- 1. Section 602.2.1 Prohibited use. In dwelling units subject to Section 602.2, one or more unvented room heaters shall not be used as the sole source of comfort heat in a dwelling unit.
- 2. <u>Section 603.7 Fuel tanks and systems. Fuel gas or combustible or flammable liquid containers, tanks, and piping systems shall be maintained in compliance with the compliance with the</u>

- code under which they were installed, kept in safe working condition, and capable of performing the intended function, or removed or abandoned in accordance with the Virginia Statewide Fire Prevention Code.
- <u>3.</u> Section 607.2 Clothes dryer exhaust duct. Required or provided clothes dryer exhaust systems shall be maintained in accordance with the applicable building code.

#### 13VAC5-63-545. Chapter 7 Fire safety requirements.

- A. Delete the following sections from Chapter 7 of the IPMC:
  - 1. Section 701.2 Responsibility.
  - 2. Section <del>704.1.2</del> <u>704.5</u> Fire department connection.
  - 3. Section <del>704.2.1</del> <u>704.6.1</u> Where required.
  - 4. Section <del>704.2.1.1</del> <u>704.6.1.1</u> Group R-1.
  - 5. Section <del>704.2.1.2</del> <u>704.6.1.2</u> Groups R-2, R-3, R-4, and I-1.
  - 6. Section  $\frac{704.2.1.3}{204.6.1.3}$  Installation near cooking appliances.
  - 7. Section <del>704.2.1.4</del> <u>704.6.1.4</u> Installation near bathrooms.
  - 8. Section <del>704.2.2</del> <u>704.6.2</u> Interconnection.
  - 9. Section <del>704.2.3</del> <u>704.6.3</u> Power source.
  - 10. Section 704.2.4 704.6.4 Smoke detection system.
  - <u>11. Section 704.7 Single-station and multiple-station</u> smoke alarms.
- B. Change the following sections in Chapter 7 of the IPMC:
- 1. Section 701.1 General. The provisions of this chapter shall govern the maintenance of fire safety facilities and equipment.
- 2. Section 702.1 General. The means of egress system shall be maintained in accordance with the applicable building code and Chapter 10 of the SFPC to provide a safe, continuous, and unobstructed path of travel from any point in a building or structure to the public way.
- <u>3.</u> Section 702.2 Aisles. The required width of aisles shall be maintained in accordance with the applicable building code.
- 3. 4. Section 702.3 Doors. Means of egress doors shall be maintained and, to the extent required by the code in effect at the time of construction, shall be readily openable from the side from which egress is to be made without the need for keys, special knowledge, or effort.
- 4. <u>5.</u> Section 702.4 Emergency escape openings. Required emergency escape openings shall be maintained in accordance with the code in effect at the time of construction and to the extent required by the code in effect

- at the time of construction shall be operational from the inside of the room without the use of keys or tools. Bars, grilles, grates, or similar devices are permitted to be placed over emergency escape and rescue openings provided the minimum net clear opening size complies with the code that was in effect at the time of construction and such devices shall be releasable or removable from the inside without the use of a key, tool, or force greater than that which is required for normal operation of the escape and rescue opening.
- 5. <u>6.</u> Section 704.1 General. Systems, devices, and equipment to detect a fire, actuate an alarm, or suppress or control a fire or any combination thereof shall be maintained in an operable condition at all times.
- 6. 7. Section 704.1.1 Automatic sprinkler systems. Inspection, testing, and maintenance of automatic sprinkler systems shall be in accordance with NFPA 25 for the purpose of operation and maintenance Maintenance and alterations. Fire protection systems shall be maintained in accordance with the original installation standards for that system. Alterations and repairs to fire protection systems shall be done in accordance with the applicable building code and the applicable standards.
- 8. Section 704.1.2 Required fire protection systems. Fire protection systems shall be repaired, operated, tested, and maintained in accordance with this code. A fire protection system for which a design option, exception, or reduction to the provisions of this code or the applicable building code has been granted shall be considered to be a required system.
- 9. Section 704.1.3 Fire protection systems. Fire protection systems shall be maintained in accordance with the Statewide Fire Prevention Code.
- 10. Section 704.3.1 Preplanned impairment programs. Preplanned impairments shall be authorized by the impairment coordinator. Before authorization is given, a designated individual shall be responsible for verifying that all of the following procedures have been implemented:
  - 1. The extent and expected duration of the impairment have been determined.
  - 2. The areas or buildings involved have been inspected, and the increased risks determined.
  - 3. Recommendations have been submitted to management or the building owner or manager.
  - 4. The fire department has been notified.
  - 5. The insurance carrier, the alarm company, the building owner or manager, and other authorities having jurisdiction have been notified.
- 6. The supervisors in the areas to be affected have been notified.

- 7. A tag impairment system has been implemented.
- 8. Necessary tools and materials have been assembled on the impairment site.
- 11. Section 704.4 Removal of or tampering with equipment. It shall be unlawful for any person to remove, tamper with, or otherwise disturb any fire hydrant, fire detection and alarm system, fire suppression system, or other fire appliance required by this code or the applicable building code except for the purpose of extinguishing fire, for training purposes, for recharging or making necessary repairs, or where approved by the fire code official.
- 12. Section 704.4.2 Removal of existing occupant-use hose lines. The fire code official is authorized to permit the removal of existing occupant-use hose lines where all of the following conditions exist:
  - 1. Installation is not required by this code or the applicable building code.
  - 2. The hose line would not be utilized by trained personnel or the fire department.
  - 3. The remaining outlets are compatible with local fire department fittings.
- 7. 13. Section 704.2 704.6 Single-station and multiple-station smoke alarms. Required or provided single-station and multiple-station smoke alarms shall be maintained in accordance with the applicable building code.

DOCUMENTS INCORPORATED BY REFERENCE (13VAC5-63)

International Code Council, Inc., 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001-2070 (http://www.iccsafe.org/):

International Building Code - 2015 2018 Edition

International Energy Conservation Code - 2015 2018 Edition

International Existing Building Code - 2015 2018 Edition

International Fire Code - 2015 2018 Edition

International Fuel Gas Code - 2015 2018 Edition

International Mechanical Code - 2015 2018 Edition

International Property Maintenance Code - 2015 2018 Edition

International Plumbing Code - 2015 2018 Edition

International Residential Code - 2015 2018 Edition

International Swimming Pool and Spa Code - 2015 2018 Edition

International Zoning Code - 2015 2018 Edition

ICC/ANSI A117.1-09, Accessible and Usable Buildings and Facilities, Approved November 26, 2003

ANSI/RESNET/ICC 380 - 2016, Standard for Testing Airtightness of Building Enclosures, Airtightness of Heating and Cooling Air Distribution and Airflow of Mechanical Ventilation Systems

<u>CSA B805 - 2018/ICC 805 - 2018, Rainwater Harvesting</u> Systems

Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206 (https://www.acca.org/):

Manual J-11 J-16, Residential Load Calculation, Eighth Edition

Manual S-13 S-14, Residential Equipment Selection

ACI 318-14, Building Code Requirements for Structural Concrete, American Concrete Institute, 38800 Country Club Drive, Farmington Hills, MI 48331 (http://www.concrete.org/)

American Petroleum Institute, 1220 L Street, NW, Washington, DC 20005-4070 (http://www.api.org/):

API 650-09, Welded Tanks for Oil Storage, Eleventh Edition, June 2007 (Addendum 1, November 2008, Addendum 2, November 2009, effective May 1, 2010)

API 653-09, Tank Inspection, Repair, Alteration, and Reconstruction

ANSI LC1/CSA 6.26-14, Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing (CSST), American National Standards Institute, 25 West 43rd Street, Fourth Floor, New York, NY 10036

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., 1791 Tullie Circle, NE, Atlanta, GA 30329-2305 (https://www.ashrae.org/)

ASHRAE 62.1-13, Ventilation for Acceptable Indoor Air Quality

American Society of Testing Materials International, 100 Barr Harbor Drive, P.O. Box C700, West Conshocken Conshohocken, PA 19428-2959 (http://www.astm.org/):

ASTM C199-84(2011), Standard Test Method for Pier Test for Refractory Mortar

ASTM C315-07(2011), Standard Specification for Clay Flue Liners and Chimney Pots

ASTM C1261-10 C1261-13, Standard Specification for Firebox Brick for Residential Fireplaces

ASTM <del>D1557-12</del> <u>D1557-12e1</u>, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup>(2700 kN-m/m<sup>3</sup>))

ASTM E84-2013A E84-2016, Standard Test Methods for Surface Burning Characteristics of Building Materials

ASTM E90-90, Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions

ASTM E108-11, Standard Test Methods for Fire Tests of Roof Coverings

ASTM <u>E119-2012A</u> <u>E119-2016</u>, Standard Test Methods for Fire Tests of Building Construction and Materials

ASTM E329-02, Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

ASTM E779-10, Standard Test Method for Determining Air Leakage Rate by Fan Pressurization

ASTM E1827-11, Standard Test Methods for Determining Airtightness of Buildings Using an Orifice Blower Door

ASTM F1504-14, Standard Specification for Folded Poly (Vinyl Chloride (PVC) Pipe for Existing Sewer and Conduit Rehabilitation

ASTM F1871-11, Standard Specification for Folded/Formed Poly (Vinyl Chloride) Pipe Type A for Existing Sewer and Conduit Rehabilitation

ASTM F2006-10 F2006-17, Standard Safety Specification for Window Fall Prevention Devices for Nonemergency Escape (Egress) and Rescue (Ingress) Windows

ASTM F2090-10 F2090-17, Standard Specification for Window Fall Prevention Devices with Emergency Escape (Egress) Release Mechanisms

CAN/CSA-B64.10-01, Manual for the Selection and Installation of Backflow Prevention Devices/Manual for the Maintenance and Field Testing of Backflow Prevention Devices, June 2003, National Standards of Canada, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada L4W5N6 (http://www.csa.ca/)

American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990 (https://www.asme.org/):

ASME A17.1/CSA <u>B44-13</u> <u>B44-16</u>, Safety Code for Elevators and Escalators

ASME A17.3 2008, Safety Code for Existing Elevators and Escalators

ASME A18.1 2008, Safety Standard for Platform Lifts and Stairway Chairlifts

American Society of Sanitary Engineering, 901 Canterbury Road, Suite A, Westlake, OH 44145 (http://www.asse-plumbing.org/):

ASSE 1010-2004, Performance Requirements for Water Hammer Arrestors

ASSE 1022-03, Performance Requirements for Backflow Preventer for Beverage Dispensing Equipment

ASSE 1024-04, Performance Requirements for Dual Check Valve Type Backflow Preventers (for Residential Supply Service or Individual Outlets)

ASSE 5010-1013-1, Field Test Procedure for a Reduced Pressure Principle Assembly Using a Differential Pressure Gauge, 1991

ASSE 5010-1015-1, Field Test Procedure for a Double Check Valve Assembly Using a Duplex Gauge, 1991

ASSE 5010-1015-2, Field Test Procedure for a Double Check Valve Assembly Using a Differential Pressure Gauge - High- and Low-Pressure Hose Method, 1991

ASSE 5010-1015-3, Field Test Procedure for a Double Check Valve Assembly Using a Differential Pressure Gauge - High Pressure Hose Method, 1991

ASSE 5010-1015-4, Field Test Procedure for a Double Check Valve Assembly Using a Site Tube, 1991

ASSE 5010-1020-1, Field Test Procedures for a Pressure Vacuum Breaker Assembly, 1991

ASSE 5010-1047-1, Field Test Procedure for a Reduced Pressure Detector Assembly Using a Differential Pressure Gauge, 1991

ASSE 5010-1048-1, Field Test Procedure for a Double Check Detector Assembly Using a Duplex Gauge, 1991

ASSE 5010-1048-2, Field Test Procedure for a Double Check Detector Assembly Using a Differential Pressure Gauge - High- and Low-Pressure Hose Method, 1991

ASSE 5010-1048-3, Field Test Procedure for a Double Check Detector Assembly Using a Differential Pressure Gauge - High-Pressure Hose Method, 1991

ASSE 5010-1048-4, Field Test Procedure for a Double Check Detector Assembly Using a Site Tube, 1991

American Society of Civil Engineers/Structural Engineering Institute, 1801 Alexander Bell Drive, Reston, VA 20191-4400 (http://www.asce.org/sei/)

ASCE/SEI 7-10 7-16, Minimum Design Loads for Buildings and Other Structures

ASCE/SEI 41-13, Seismic Evaluation and Retrofit of Existing Buildings

American Wood Council, 222 Catocin Circle, Suite 201, Leesburg, VA 20175 (http://www.awc.org/):

AWC NDS-15, National Design Specification for Wood Construction-with 2005 Supplement

AWC STJR-15, Span Table for Joists and Rafters

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471 (http://www.nfpa.org/):

NFPA 13-13 13-16, Installation of Sprinkler Systems

NFPA 13R 10 13R 13 13R-16, Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height

NFPA 25 14, Standard for the Inspection, Testing and Maintenance of Water Based Fire Protection Systems

NFPA 70-14, National Electrical Code

NFPA 72-13, National Fire Alarm Code

NFPA 91-15, Standard for Exhaust Systems for Air Conveying of Vapors, Mists and Particulate Solids

NFPA 99-15, Health Care Facilities Code

NFPA 101-15, Life Safety Code

NFPA 105-13 105-16, Standard for the Installation of Smoke Door Assemblies

NFPA 285-12 285-17, Standard Method of Test for the Evaluation of Flammability Characteristics of Exterior Nonload-bearing Wall Assemblies Containing Combustible Components

NFPA 495-13 495-18, Explosive Materials Code

NFPA <del>701-10</del> <u>701-15</u>, Standard Methods of Fire Tests for Flame-propagation of Textiles and Films

NFPA 720-15, Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment

NSF 50 2009a 50-2015, Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities, NSF International, 789 Dixboro Road, P.O. Box 130140, Ann Arbor, MI 48113 (http://nsf.org/)

TFI RMIP-09, Aboveground Storage Tanks Containing Liquid Fertilizer, Recommended Mechanical Integrity Practices, December 2009, The Fertilizer Institute, 820 First Street, NE, Suite 430, Washington, DC 20002

Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, IL 60062 (http://www.ul.com/):

UL 217-06, Single- and Multiple-station Smoke Alarmswith revisions through April 2012

UL 723-2008, Standard for Test of Surface Burning Characteristics of Building Materials-with Revisions through September 2010

UL 762 2010, Outline of Investigation for Power Ventilators for Restaurant Exhaust Appliances

UL 790-04, Standard Test Methods for Fire Tests of Roof Coverings-with Revisions through October 2008

UL 1784-01, Air Leakage Tests of Door Assemblies, revised July 2009

UL 1978-2010, Grease Ducts

UL 2034-2008, Standard for Single and Multiple Station Carbon Monoxide Alarms, revised February 2009

UL 2075-2013, Gas and Vapor Detectors and Sensors (Second Edition, March 5, 2013)

<u>UL 8782-2017</u>, <u>Pollution Control Units for Commercial</u> Cooking

Interim Remediation Guidance for Homes with Corrosion from Problem Drywall, April 2, 2010, Joint Report, Consumer Products Safety Commission and Department of Housing and Urban Development

VA.R. Doc. No. R19-5887; Filed January 7, 2020, 2:26 p.m.

#### **Proposed Regulation**

REGISTRAR'S NOTICE: The Board of Housing and Community Development is claiming an exemption from Article 2 of the Administrative Process Act pursuant to § 2.2-4006 A 12 of the Code of Virginia, which excludes regulations adopted by the Board of Housing and Community Development pursuant to the Statewide Fire Prevention Code (§ 27-94 et seq.), the Industrialized Building Safety Law (§ 36-70 et seq.), the Uniform Statewide Building Code (§ 36-97 et seq.), and § 36-98.3 of the Code of Virginia, provided the board (i) provides a Notice of Intended Regulatory Action in conformance with the provisions of § 2.2-4007.01, (ii) publishes the proposed regulation and provides an opportunity for oral and written comments as provided in § 2.2-4007.03, and (iii) conducts at least one public hearing as provided in §§ 2.2-4009 and 36-100 prior to the publishing of the proposed regulations. The Board of Housing and Community Development will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

<u>Title of Regulation:</u> 13VAC5-91. Virginia Industrialized Building Safety Regulations (amending 13VAC5-91-10, 13VAC5-91-20, 13VAC5-91-150, 13VAC5-91-160, 13VAC5-91-260).

Statutory Authority: § 36-73 of the Code of Virginia.

**Public Hearing Information:** 

March 16, 2020 - 10 a.m. - Virginia Housing Development Authority Virginia Housing Center, 4224 Cox Road, Glen Allen, Virginia 23060.

Public Comment Deadline: April 6, 2020.

Agency Contact: Kyle Flanders, Senior Policy Analyst, Department of Housing and Community Development, Main Street Centre, 600 East Main Street, Suite 300, Richmond, VA 23219, telephone (804) 786-6761, FAX (804) 371-7090,

TTY (804) 371-7089, or email kyle.flanders@dhcd.virginia.gov.

<u>Small Business Impact Review Report of Findings:</u> This proposed regulatory action serves as the report of the findings of the regulatory review pursuant to § 2.2-4007.1 of the Code of Virginia.

Background: The Virginia Industrialized Building Safety Regulations (13VAC5-91) govern the in-factory construction of industrialized buildings, which are also known as modular buildings. The regulations provide the same standards for construction as those buildings constructed on-site and regulated by the Virginia Uniform Statewide Building Code (13VAC5-63). Both regulations incorporate nationally recognized model building codes and standards to provide the technical requirements for the actual construction of the regulated buildings. Every three years, new editions of the model codes become available. At that time, the Board of Housing and Community Development initiates a regulatory action to incorporate the newest editions of the model codes into the regulation as well as accepting proposals for changes to the regulation from affected client groups and the public.

#### Summary:

*The proposed amendments include the following:* 

In 13VAC5-91-10, a definition for "closed panel construction" is added; and

In 13VAC5-91-20, a compliance path for intermodal freight containers, moving containers, and storage containers as building modules or components is added.

#### 13VAC5-91-10. Definitions.

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise.

"Administrator" means the Director of DHCD or his designee.

"Approved" as applied to a material, device, method of construction, registered building, or as otherwise used in this chapter means approved by the administrator.

"Building official" means the officer or other designated authority charged with the administration and enforcement of the USBC, or duly authorized representative.

"Closed panel construction" means a method of construction utilizing individual wall, roof, or floor components (panels) manufactured off site for installation or assembly at the construction site, where a portion of the component cannot be inspected at the building site without disassembly or damage to the component.

"Compliance assurance agency" means an architect or professional engineer registered in Virginia, or an organization, determined by DHCD to be specially qualified by reason of facilities, personnel, experience, and demonstrated reliability, to investigate, test and evaluate industrialized buildings; to list such buildings complying with standards at least equal to this chapter; to provide adequate follow-up services at the point of manufacture to ensure that production units are in full compliance; and to provide a label as evidence of compliance.

"DHCD" means the Virginia Department of Housing and Community Development.

"ICC" means the International Code Council, Inc.

"Industrialized building" means a combination of one or more closed panels, sections or modules, subject to state regulations and including the necessary electrical, plumbing, heating, ventilating, and other service systems, manufactured off-site and transported to the point of use for installation or erection, with or without other specified components, to comprise a finished building. Manufactured homes defined in § 36-85.3 of the Code of Virginia and certified under the provisions of the National Manufactured Housing Construction and Safety Standards Act (42 USC § 5401 et seq.) shall not be considered industrialized buildings for the purpose of this law.

"Label," "certification label," or "compliance assurance agency certification label" means the label required by 13VAC5-91-210.

"Model" means a specific design of an industrialized building designated by the producer of the building including production buildings with variations and options that do not affect compliance with the standards governing structural, plumbing, mechanical, or electrical systems or any other items governed by this chapter.

"Registered" means an industrialized building which displays a registration seal issued by DHCD in accordance with this chapter.

"Seal," "registration seal," or "Virginia registration seal" means the seal required by 13VAC5-91-260.

"SBCO" means the State Building Codes Office within DHCD.

"State Review Board" means the Virginia State Building Code Technical Review Board as established by § 36-108 of the Code of Virginia.

"This law" means the Virginia Industrialized Building Safety Law as embraced in Chapter 4 (§ 36-70 et seq.) of Title 36 of the Code of Virginia.

"USBC" means the Virginia Uniform Statewide Building Code (13VAC5-63).

#### 13VAC5-91-20. Application and compliance.

A. In accordance with § 36-81 of the Code of Virginia, registered industrialized buildings shall be acceptable in all

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localities as meeting the requirements of the Industrialized Building Safety Law (Chapter 4 (§ 36-70 et seq.) of Title 36 of the Code of Virginia), which shall supersede the building codes and regulations of the counties, municipalities and state agencies. Local requirements affecting industrialized buildings, including zoning, utility connections, preparation of the site and maintenance of the unit shall remain in full force and effect. All building officials are authorized to and shall enforce the provisions of the Industrialized Building Safety Law (Chapter 4 (§ 36-70 et seq.) of Title 36 of the Code of Virginia) and this chapter.

B. In accordance with § 36-78 of the Code of Virginia, no person, firm or corporation shall offer for sale or rental, or sell or rent, any industrialized building subject to any provisions of this chapter unless it conforms with the applicable provisions of this chapter.

Further, any industrialized building constructed before January 1, 1972, shall remain subject to the ordinances, laws or regulations in effect at the time such industrialized building was constructed. Additionally, as a requirement of this chapter, any industrialized building bearing the label of a compliance assurance agency shall remain subject to the provisions of this chapter that were effective when such building was constructed, regardless of whether the building has been relocated.

- C. In accordance with § 36-99 of the Code of Virginia and in accordance with the USBC, the installation or erection of industrialized buildings and alterations, additions, or repairs to industrialized buildings are regulated by the USBC and not this chapter. The USBC provides for administrative requirements for permits, inspections, and certificates of occupancy for such work.
- D. The use of off-site manufactured intermodal freight containers, moving containers, or storage containers as building modules or components of an industrialized building must be approved by the administrator in accordance with 13VAC5-91-150.

In reviewing the use of intermodal freight containers as structural building components, the administrator will accept evaluation reports from accredited third-party evaluation services.

<u>E.</u> Off-site manufactured intermodal freight containers, moving containers, and storage containers placed on site temporarily or permanently for use as a storage container are not subject to this chapter.

#### 13VAC5-91-150. When modification may be granted.

The administrator shall have the power upon request in specific cases to authorize modification of this chapter so as to permit certain specified alternatives where the objectives of this law can still be fulfilled. Such request shall be in writing and shall be accompanied by the plans, specifications, and

other information necessary for an adequate evaluation of the modification requested. <u>In reviewing the use of alternative methods or materials</u>, the administrator may consider evaluation reports from accredited third-party evaluation services.

#### 13VAC5-91-160. Use of model codes and standards.

A. Industrialized buildings entering the production assembly line after the effective date of the 2015 2018 edition of this chapter shall comply with all applicable requirements of the codes and standards listed in subsection B of this section except that the following codes and standards may be used for industrialized buildings entering the assembly line during a one-year period after the effective date of the 2015 2018 edition of this chapter:

- 1. ICC International Building Code 2012 2015 Edition
- 2. ICC International Plumbing Code 2012 2015 Edition
- 3. ICC International Mechanical Code 2012 2015 Edition
- 4. National Fire Protection Association Standard Number 70 (National Electrical Code) 2014 2014 Edition
- 5. ICC International Fuel Gas Code 2012 2015 Edition
- 6. ICC International Energy Conservation Code <del>2012</del> 2015 Edition
- 7. ICC International Residential Code 2012 2015 Edition
- B. The following documents are adopted and incorporated by reference to be an enforceable part of this chapter:
  - 1. ICC International Building Code 2015 2018 Edition
  - 2. ICC International Plumbing Code 2015 2018 Edition
  - 3. ICC International Mechanical Code 2015 2018 Edition
  - 4. National Electrical Code 2014 2017 Edition
  - 5. ICC International Fuel Gas Code 2015 2018 Edition
  - 6. ICC International Energy Conservation Code 2015 2018 Edition
  - 7. ICC International Residential Code 2015 2018 Edition

Note: As the  $\frac{2015}{2018}$  editions of the International Codes are incorporated by reference as the construction standards for use with these regulations, this chapter is also referred to as the  $\frac{2015}{2018}$  edition of the Virginia Industrialized Building Safety Regulations or the  $\frac{2015}{2018}$  edition of this chapter.

The codes and standards referenced above may be procured from:

International Code Council, Inc. 500 New Jersey Avenue, NW, 6th Floor Washington, DC 20001-2070

# 13VAC5-91-260. Registration seal for industrialized buildings.

A. Registered industrialized buildings shall be marked with approved registration seals issued by the SBCO. The seals shall be applied to a registered industrialized building intended for sale or use in Virginia prior to the shipment of the building from the place of manufacture. The seals shall be applied by the compliance assurance agency or by the manufacturer when authorized to do so by the compliance assurance agency.

B. Registered industrialized buildings shall bear one registration seal on each manufactured section or module, or, as an alternative, the registration seal for each manufactured section or module may be placed in one location in the completed building.

C. <u>Closed panel construction shall require one registration</u> seal for every 600 square feet, or part thereof, of floor area.

<u>D.</u> Approved registration seals shall be purchased by the compliance assurance agency from the SBCO in advance of use. The fee for each registration seal shall be \$75. Fees shall be submitted by checks made payable to "Treasurer of Virginia" or shall be submitted by electronic means. Payment for the seals must be received by the SBCO before the seals can be sent to the user. The compliance assurance agency shall maintain permanent records of seals purchased, including a record of any manufacturers receiving such seals.

D. E. To the extent practicable, the registration seal shall be installed so that it cannot be removed without destroying it. The seal shall be applied in the vicinity of the electrical distribution panel or in another location that is readily accessible for inspection and shall be installed near the certification label.

E. F. In accordance with § 36-85.1 of the Code of Virginia, any person or corporation having paid the fee for an approved registration seal that it will not use may, unless and except as otherwise specifically provided, within one year from the date of the payment of any such fee, apply to the administrator for a refund, in whole or in part, of the fee paid; provided that no payment shall be recovered unless the approved registration seal is returned unused and in good condition to the administrator. Additionally, as a requirement of this chapter, an administrative and processing fee of 25% of the amount of the refund due shall be deducted from the refund; however, such deduction shall not exceed \$250.

DOCUMENTS INCORPORATED BY REFERENCE (13VAC5-91)

International Code Council, 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001-2070 (http://shop.iccsafe.org/codes.html):

ICC International Plumbing Code -  $\frac{2012}{2018}$  and  $\frac{2015}{2018}$  Editions

ICC International Mechanical Code -  $\frac{2012}{2015}$  and  $\frac{2015}{2018}$  Editions

ICC International Building Code -  $\frac{2012}{2015}$  and  $\frac{2015}{2018}$  Editions

ICC International Residential Code -  $\frac{2012}{2015}$  and  $\frac{2015}{2018}$  Editions

ICC International Fuel Gas Code -  $\frac{2012}{2015}$  and  $\frac{2015}{2018}$  Editions

ICC International Energy Conservation Code - 2012 2015 and 2015 2018 Editions

NFPA 70, National Electrical Code - 2011 2014 and 2014 2017 Editions, National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471 (http://www.nfpa.org/)

ASTM Standard Number E541-10 - Standard Specification for Agencies Engaged in System Analysis and Compliance Assurance for Manufactured Building, American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 (http://www.astm.org/)

VA.R. Doc. No. R19-5885; Filed January 7, 2020, 2:28 p.m.





#### **TITLE 14. INSURANCE**

#### STATE CORPORATION COMMISSION

#### **Reproposed Regulation**

REGISTRAR'S NOTICE: The State Corporation Commission is claiming an exemption from the Administrative Process Act in accordance with § 2.2-4002 A 2 of the Code of Virginia, which exempts courts, any agency of the Supreme Court, and any agency that by the Constitution is expressly granted any of the powers of a court of record.

<u>Title of Regulation:</u> 14VAC5-235. Rules Governing Health Insurance Balance Billing (adding 14VAC5-235-10, 14VAC5-235-20, 14VAC5-235-30).

<u>Statutory Authority:</u> §§ 12.1-13 and 38.2-223 of the Code of Virginia.

<u>Public Hearing Information:</u> A public hearing will be held upon request.

Public Comment Deadline: March 20, 2020.

Agency Contact: James Young, Insurance Policy Advisor, Bureau of Insurance, State Corporation Commission, P.O. Box 1157, Richmond, VA 23218, telephone (804) 371-9612, FAX (804) 371-9944, or email james.young@scc.virginia.gov.

#### Summary:

Pursuant to Chapter 432 of the 2019 Acts of Assembly, the action promulgates Rules Governing Health Insurance Balance Billing (14VAC5-235). The proposed provisions of the new chapter remove the burden of surprise balance billing from the covered person and allow the covered person to actively choose whether to receive health care services from an in-network or out-of-network provider at an in-network facility for nonemergency services. Changes in the reproposed regulation include (i) adding a definition of "balance bill" and clarifying the definition of "out-ofnetwork provider" to include only provider groups, (ii) requiring that provider contracts include that the health carrier must notify a facility at least 30 days prior to the date any provider group at such facility will no longer be participating in the provider network in any one of the carrier's health benefit plans, (iii) adding a new provision that breach of a provider contract brought about by noncompliance with 14VAC5-235-20 A shall not constitute a material breach if the party at fault takes responsibility for the balance bill amount owed, and (iv) requiring that health carriers comply with 14VAC5-235-20 A as soon as practicable instead of within 90 days after the regulation becomes effective.

AT RICHMOND, JANUARY 14, 2020

COMMONWEALTH OF VIRGINIA, ex rel.
STATE CORPORATION COMMISSION

CASE NO. INS-2019-00081

Ex Parte: In the matter of Adopting New Rules Governing Health Insurance Balance Billing

# ORDER TO TAKE NOTICE OF REVISED PROPOSED RULES

By Order to Take Notice ("Order") entered June 6, 2019, interested persons were ordered to take notice that subsequent to August 9, 2019, the State Corporation Commission ("Commission") would consider the entry of an order adopting proposed new rules to be promulgated at Chapter 235 of Title 14 of the Virginia Administrative Code, entitled "Rules Governing Health Insurance Balance Billing" ("Rules"), which would add new rules at 14 VAC 5-235-10 through 14 VAC 5-235-30, unless on or before August 9, 2019, any person objecting to the adoption of the proposed Rules filed a request for hearing with the Clerk of the Commission ("Clerk").

The Order also required interested persons to file their comments in support or in opposition to the proposed Rules with the Clerk on or before August 9, 2019.

Following the submission of numerous comments to the Clerk as well as requests for hearing, the Commission entered an Order Scheduling Hearing on August 14, 2019 ("Scheduling Order"). The Scheduling Order set a hearing on September 12, 2019, for the Commission to receive additional public comment on the proposed Rules, as well as required the Bureau of Insurance ("Bureau") to file with the Clerk a response to the legal issues raised in the comments by September 17, 2019, and allowed any interested persons to file with the Clerk a reply to the Bureau's response by September 27, 2019.

Pursuant to the Scheduling Order, the Commission received additional public comment on the proposed Rules at a hearing held on September 12, 2019. The Bureau subsequently filed a response on September 17, 2019, which addressed the legal issues raised by the written comments submitted to the Commission as well as the comments received during the hearing on September 12, 2019. Several interested persons filed replies to the Bureau's response on or before September 27, 2019.

The Commission entered an Order Scheduling Oral Argument on October 4, 2019, which scheduled oral argument on October 31, 2019, to address legal issues concerning the proposed Rules, including the Commission's authority under Titles 12.1 and 38.2 of the Code of Virginia to issue the proposed Rules. The Order Scheduling Oral Argument required any interested person or entity desiring to provide legal argument at hearing to comply with the Commission's Rules of Practice and Procedure, 5 VAC 5-20-10 et seq., as well as file with the Clerk a notification of intent to participate in the legal argument, along with the name(s) of any counsel representing the interested person or entity in the legal argument, by October 24, 2019.

Pursuant to the Order Scheduling Oral Argument, the Commission held a hearing on October 31, 2019, and heard oral argument from interested persons and the Bureau addressing legal issues concerning the proposed Rules.

The Bureau has considered the comments received as well as the arguments provided by interested persons and entities concerning the proposed Rules. In an effort to address these concerns, the Bureau has proposed several revisions and clarifications to the proposed Rules. The Bureau's proposed revisions include: (a) changes to the definitions in 14 VAC 5-235-10, which add a definition of "balance bill" and clarify the definition of "out-of-network provider" to include only provider groups; (b) adding a subsection to 14 VAC 5-235-20 A, that provider contracts must contain a provision which requires a health carrier to notify a facility at least 30 days prior to the date any provider group at such facility will no longer be participating in the provider network in any one of the carrier's health benefit plans; (c) clarifications to 14 VAC 5-235-20 A to make the subsection consistent with changes to the definitions in 14 VAC 5-235-10; (d) adding a new 14 VAC 5-235-20 B to provide that breach of a provider contract brought about by non-compliance with 14 VAC 5-

235-20 A shall not constitute a material breach if the party at fault takes responsibility for the balance bill amount owed; and (e) revising 14 VAC 5-235-20 C to require that health carriers shall seek to amend provider contracts to comply with 14 VAC 5-235-20 A as soon as practicable and deleting the requirement to do so within 90 days after the effective date of the regulation.

The Bureau further recommends that the proposed Rules and the recommended revisions to these proposed Rules be subject to an additional comment period expiring March 20, 2020.

NOW THE COMMISSION, having considered the comments, the Bureau's proposed modifications and revisions to the proposed Rules, is of the opinion that interested persons should have an opportunity to comment on the Bureau's revised proposed Rules by March 20, 2020.

#### Accordingly, IT IS ORDERED THAT:

- (1) The revised proposed Rules entitled "Rules Governing Health Insurance Balance Billing," recommended to be set out at 14 VAC 5-235-10 through 14 VAC 5-235-30, are attached hereto and made a part hereof.
- (2) All interested persons who desire to comment in support of or in opposition to, or request a hearing to consider the adoption of, the revised proposed Rules shall file such comments or hearing request on or before March 20, 2020, with Joel H. Peck, Clerk, State Corporation Commission, c/o Document Control Center, P.O. Box 2118, Richmond, Virginia 23218. Interested persons desiring to submit comments electronically may do so by following the instructions at the Commission's website: http://www.scc.virginia.gov/case. All comments shall refer to Case No. INS-2019-00081.
- (3) The Bureau forthwith shall provide notice of the revised proposed Rules to all health carriers licensed in Virginia to offer a managed care health insurance plan and to all interested persons, including those persons who previously submitted comments and requested a hearing on the Bureau's proposed Rules.
- (4) The Commission's Division of Information Resources forthwith shall cause a copy of this Order, together with the proposed rules, to be forwarded to the Virginia Registrar of Regulations for appropriate publication in the Virginia Register of Regulations.
- (5) The Commission's Division of Information Resources shall make available this Order and the attached proposal on the Commission's website: http://www.scc.virginia.gov/case.
- (6) The Bureau shall file with the Clerk of the Commission an affidavit of compliance with the notice requirements of Ordering Paragraph (3) above.
- (7) This matter is continued.

AN ATTESTED COPY hereof shall be sent by the Clerk of the Commission to:

Office of the Attorney General, Division of Consumer Counsel, 202 N. 9th Street, 8th Floor, Richmond, Virginia 23219-3424; and a copy hereof shall be delivered to the Commission's Office of General Counsel and the Bureau of Insurance in care of Deputy Commissioner Julie S. Blauvelt.

# CHAPTER 235 RULES GOVERNING HEALTH INSURANCE BALANCE BILLING

#### 14VAC5-235-10. Definitions.

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

["Balance bill" means the amount for elective health care services the out-of-network provider will accept as payment in full that exceeds the sum of (i) the covered person's innetwork cost-sharing requirements and (ii) payments made by the health carrier for covered benefits.]

"Cost-sharing requirement," "in-network provider," and "provider group" shall have the meanings set forth in § 38.2-3445.1 of the Code of Virginia.

"Covered benefits," "covered person," "emergency services," "facility," "health benefit plan," "health care provider," "health carrier," "managed care plan," and "network" shall have the meanings set forth in § 38.2-3438 of the Code of Virginia.

<u>"Elective health care services" means covered benefits</u> rendered to a covered person that are not emergency services.

"Out-of-network provider" means a [ health care provider or ] provider group that is not contracted with a health carrier to provide health care services to a covered person under a health benefit plan as a member of the health benefit plan's network.

#### 14VAC5-235-20. Balance billing of provider services.

- A. [ Any No ] provider contract [ with a facility ] entered into by [ and between a facility and ] a health carrier offering a managed care plan shall [ fail to ] contain [ a the following provisions:
  - 1. A ] provision that requires the [ health carrier to notify the facility at least 30 days prior to the date any provider group at the facility will no longer be participating in the provider network in any one of the health carrier's health benefit plans.
  - 2. A provision that requires the ] facility to notify a covered person no later than at the time of preadmission or preregistration if the covered person will or is likely to receive elective health care services from an out-of-network provider and document in writing that this notice

was provided to the covered person. Prior to the covered person's receipt of elective health care services, the facility shall obtain written consent from the covered person [ to either [ (i) to ] accept [ or not accept ] any necessary health care services from [ in network out-of-network ] providers [ only or (ii) accept any necessary health care services from out of network providers ]. The notice provided to the covered person shall state that elective health care services received from an out-of-network provider may result in amounts owed in addition to any cost-sharing requirements.

[ B. Any provider contract entered into by and between a facility and a health carrier offering a managed care plan shall also contain a 3. A ] provision that [ notifies a facility states ] that [ a facility's or health carrier's ] failure to comply with requirements of [ subsection subdivisions ] A [ 1 and A 2 ] of this section shall result in the [ facility party at fault ] being financially responsible for any [ balance bill for ] elective health care services rendered by the out-of-network provider [ to the extent that the cost of these services exceeds the covered person's in network cost sharing requirements ].

[ B. Any breach of the provider contract brought about by noncompliance with subsection A of this section shall not constitute a material breach if the party at fault takes responsibility for the balance bill amount owed. ]

C. A health carrier offering a managed care plan shall seek to amend its provider contracts to comply with the provisions of [ subsections subsection ] A [ and B ] of this section as soon as practicable [ but no later than (insert date 90 days after the effective date of this regulation) ].

D. The notice requirement contained in subsection A of this section applies notwithstanding the provisions of § 38.2-3445.1 of the Code of Virginia.

#### 14VAC5-235-30. Severability.

If any provision of this chapter or its application to any person or circumstance is for any reason held to be invalid by a court, the remainder of this chapter and the application of the provisions to other persons or circumstances shall not be affected.

VA.R. Doc. No. R19-6030; Filed January 14, 2020, 7:29 p.m.

# TITLE 18. PROFESSIONAL AND OCCUPATIONAL LICENSING

# BOARD OF FUNERAL DIRECTORS AND EMBALMERS

#### **Proposed Regulation**

<u>Title of Regulation:</u> 18VAC65-30. Regulations for Preneed Funeral Planning (amending 18VAC65-30-10, 18VAC65-30-50, 18VAC65-30-60, 18VAC65-30-70, 18VAC65-30-90, 18VAC65-30-110, 18VAC65-30-180, 18VAC65-30-220, 18VAC65-30-230).

Statutory Authority: §§ 54.1-2400 and 54.1-2803 of the Code of Virginia.

#### Public Hearing Information:

March 10, 2020 - 9:30 a.m. - Training Room 2, Department of Health Professions, Perimeter Center, 9960 Mayland Drive, 2nd Floor, Suite 201, Henrico, VA, 23233.

Public Comment Deadline: April 3, 2020.

Agency Contact: Corie Tillman Wolf, Executive Director, Board of Funeral Directors and Embalmers, 9960 Mayland Drive, Suite 300, Richmond, VA 23233-1463, telephone (804) 367-4546, FAX (804) 527-4637, or email corie.wolf@dhp.virginia.gov.

<u>Basis</u>: Regulations for Preneed Funeral Planning are promulgated under the general authority of Chapter 24 of Title 54.1 of the Code of Virginia. Section 54.1-2400 provides the board with authority to promulgate regulations to administer the regulatory system. In addition, § 54.1-2803 sets out the specific powers and duties of the board and §§ 54.1-2820, 54.1-2822, 54.1-2822.1, 54.1-2824, and 54.1-2825 set out the statutory requirements for preneed contracts.

<u>Purpose</u>: The purpose of this regulatory action is to provide clear, enforceable regulations. Both the licensees and the public need clarity on contracting preneed funeral plans, so public health and safety is not jeopardized.

**Substance:** The proposed amendments:

18VAC65-30-10. Definitions: Remove the definition of "capper, steerer, or shill" as those terms are no longer used.

18VAC65-30-50. Solicitation: Clarify that registered funeral service interns are not allowed to engage in funeral preneed planning or sales.

18VAC65-30-60. Records; general: For consistency with record retention requirements for other funeral-related documents, require preneed contracts and reporting documents be maintained on the premises of the establishment for three years after the death of the contract beneficiary.

18VAC65-30-70. Record reporting: Require (i) the alphabetical or chronological listing of all preneed contracts to include where the contract is funded (e.g. name of insurance provider) and where the funds are maintained in addition to the existing requirement of how the contract is funded and (ii) modify requirements for notification to the board and the existing contract buyers when a contract provider discontinues operation by either closure or change in ownership.

18VAC65-30-90. Disclosures: Require licensees to obtain acknowledgement from contract buyers that the contract buyers have received the general price list and preneed disclosure questions and answers.

18VAC65-30-110. Cancellation or transfer of contract: Add a reference to § 64.2-730 of the Code of Virginia.

18VAC65-30-180. Life insurance or annuity: Update the reference to § 54.1-2820 of the Code of Virginia.

18VAC65-30-220. Content of preneed contracts: Clarify language related to "guaranteed" prices of goods and services to avoid confusion for consumers about those items or services that are nonguaranteed or cash advance provided by a third party and add a reference to Virginia Funeral Service Licensee to accurately reflect the most common licensure type.

18VAC65-30-230. Content of disclosure statements: Clarify (i) disclosure statements for accuracy and to benefit contract buyers or consumers, as well as compliance with Federal Trade Commission regulations; (ii) "guaranteed" prices of goods and services to avoid confusion for contract buyers or consumers; and (iii) what happens if a funeral home closes or changes ownership and what impact that change may have on a contract buyer's or consumer's choice.

<u>Issues:</u> The primary advantage to the public is a better understanding of preneed contracts for buyers or consumers and some greater assurance that funding for goods and services will be available at the time of need. All amendments are intended to provide additional consumer protection. There are no disadvantages to the public.

There are no advantages or disadvantages to the Commonwealth, except that the advantage of additional clarity will assist the board in interpretation of the law.

<u>Department of Planning and Budget's Economic Impact Analysis:</u>

Summary of the Proposed Amendments to Regulation. Following a periodic review,<sup>2</sup> the Board of Funeral Directors and Embalmers (Board) proposes to require a longer document retention period regarding preneed contracts, as well as additional disclosures, reporting, and notification.

Background. This regulation establishes rules for preneed funeral planning services. Preened contracts are purchased prior to death and provide funds to pay for the beneficiary's funeral and burial.

Estimated Benefits and Costs. A number of proposed amendments are intended to better inform the consumer about the contents of the preneed contracts. These include requiring a licensee to get a written acknowledgement from the buyer that he/she has received the general price list and preneed disclosure questions and answers; disclosure of information on where the preneed contract was funded, where the funds are maintained, and how the funds are invested; and explanations about the meanings of "guaranteed" and "nonguaranteed" contracts, and the options available to a customer under the preneed contract if a funeral home closes. The changes under this category are not expected to create large costs because licensees are already required to disclose similar information, but the changes are expected to discourage fraud and provide greater assurance that funding for goods and services would be available at the time of need.

The Board also proposes to require a licensee that discontinues operations by closure to: 1) provide the Board a current list of preneed contracts, and 2) notify buyers that they have the right to change providers at any time prior to death. The proposed amendments further specify what must be done if the provider changes ownership. If the preneed contracts are going to be honored by the new owner, a notice in a publication of general circulation would suffice. If the new owner does not intend to honor the contracts, written notice must be sent to all buyers within 90 days of the sale. The notice, as with a closure, must include a statement about the buyer's right to change providers at any time prior to death. These changes would add some costs in terms of additional reporting to the Board, and notifications to the contract holders by mail or in media, but would also help inform the Board about existing contracts, and consumers about the changes and their options in the event a funeral establishment closes or changes ownership.

Finally, the Board proposes to increase the retention period for preneed contracts from one year to three years after the death of the beneficiary. According to the Board, the licensees are already subject to the three year retention period regarding all other records such as embalming and most are believed to already keep the preneed contract records for three years. Therefore this change is not expected to create any significant impact.

Businesses and Other Entities Affected. There are 420 licensed funeral establishments and 79 licensed as branch establishments. There are 1,463 funeral service licensees with current, active licenses.<sup>3</sup> The proposed amendments would introduce additional direct administrative costs in terms of the newly required reporting to the Board and notifications to contract holders. Individual establishments and branch establishments hold licenses, but may be owned by large national companies. An adverse economic impact on

businesses is indicated because there do not appear to be any offsetting direct benefits to licensees.

Localities<sup>4</sup> Affected.<sup>5</sup> The proposed amendments should not affect any locality more than others. The proposed amendments do not introduce costs for localities.

Projected Impact on Employment. The proposed amendments should not affect employment.

Effects on the Use and Value of Private Property. The proposed amendments would not substantively affect the use and value of private property. No significant effect is expected on real estate development costs.

Adverse Effect on Small Businesses: 6

Types and Estimated Number of Small Businesses Affected. The proposed amendments affect licensed funeral establishments and branch establishments that offer preneed contracts, most if not all of which are likely small businesses. As indicated above, DHP reports 420 licensed funeral establishments and 79 licensed as branch establishments. It is not known how many of these firms offer preneed contracts.

Costs and Other Effects. The proposals to require licensees to get additional written acknowledgement from the buyer, provide additional notification to buyers, and provide additional information to the Board all require some additional staff time.

Alternative Method that Minimizes Adverse Impact. There are no clear alternative methods that both reduce adverse impact and meet the intended policy goals.

<u>Agency's Response to Economic Impact Analysis:</u> The Board of Funeral Directors and Embalmers concurs with the analysis of the Department of Planning and Budget.

#### Summary:

The proposed amendments include (i) prohibiting a funeral service intern from engaging in preneed planning or sales; (ii) clarifying and adding disclosures of information regarding the content of a preneed contract, (iii) increasing the retention period for preneed contract documentation to three years; and (iv) specifying requirements for notification to the Board of Funeral Directors and Embalmers and each contract buyer when a funeral home closes or changes ownership.

#### Part I General Information

#### 18VAC65-30-10. Definitions.

In addition to those defined in § 54.1-2800 of the Code of Virginia, the following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Appointee" means the individual selected by the contract beneficiary to arrange a preneed funeral plan on behalf of the contract beneficiary.

"Capper," "steerer," or "shill" means a person who serves to entice another to purchase a product or to direct the course of action and choice of the buyer in a preneed funeral contract sale.

"Cash advance item" means any item of service or merchandise described to a purchaser as a "cash advance," "accommodation," "cash disbursement," or similar term. A cash advance item is also any item obtained from a third party and paid for by the funeral provider on the behalf of the contract buyer. Cash advance items may include, but are not limited to, cemetery or crematory services, pallbearers, public transportation, clergy honoraria, flowers, musicians or singers, nurses, obituary notices, gratuities, and death certificates.

"Consideration," "contract price," or "funds" means money, property, or any other thing of value provided to be compensation to a contract seller or contract provider for the funeral services and funeral goods to be performed or furnished under a preneed funeral contract. Consideration does not include late payment penalties and payments required to be made to a governmental agency at the time the contract is entered into.

"Contract" means a written, preneed funeral contract, and all documents pertinent to the terms of the contract under which, for consideration paid to a contract seller or a contract provider by or on behalf of a contract buyer prior to the death of the contract beneficiary, a person promises to furnish, make available, or provide funeral services or funeral goods after the death of a contract beneficiary.

<sup>&</sup>lt;sup>2</sup>https://townhall.virginia.gov/l/ViewPReview.cfm?PRid=1641

<sup>&</sup>lt;sup>3</sup>Data source: Department of Health Professions

<sup>&</sup>lt;sup>4</sup>"Locality" can refer to either local governments or the locations in the Commonwealth where the activities relevant to the regulatory change are most likely to occur.

 $<sup>^5\</sup>S\,2.2\text{-}4007.04$  defines "particularly affected" as bearing disproportionate material impact.

<sup>&</sup>lt;sup>6</sup>Pursuant to § 2.2-4007.04 of the Code of Virginia, small business is defined as "a business entity, including its affiliates, that (i) is independently owned and operated and (ii) employs fewer than 500 full-time employees or has gross annual sales of less than \$6 million."

<sup>&</sup>lt;sup>7</sup>Virginia Employment Commission records indicate that as of the first quarter of 2019, the Commonwealth had: a) 349 Funeral Homes and Funeral Services firms, all of which had fewer than 500 employees, and b) 131 Cemeteries and Crematories firms, all of which had fewer than 500 employees.

"Contract beneficiary" means the individual for whom the funeral services and supplies are being arranged.

"Contract buyer" means the purchaser of the preneed contract.

"Contract provider" means the funeral establishment designated by the contract buyer and contracting with the contract buyer to provide for funeral services and supplies in the preneed funeral contract.

"Contract seller" means the funeral service licensee who makes the preneed arrangements with the contract buyer for the funeral service and who makes the financial arrangements for the service and the goods and supplies to be provided.

"Designee" means the individual designated to make arrangements for burial or final disposition of the remains pursuant to § 54.1-2825 of the Code of Virginia.

"Funding source" means the trust agreement, insurance policy, annuity, personal property, or real estate used to fund the preneed plan.

"Funeral supplies and services" means the items of merchandise sold or offered for sale or lease to consumers that will be used in connection with a funeral or an alternative to a funeral or final disposition of human remains including caskets, combination units, and catafalques. Funeral goods does not mean land or interests in land, crypts, lawn crypts, mausoleum crypts, or niches that are sold by a cemetery that complies with Chapter 23.1 (§ 54.1-2310 et seq.) of Title 54.1 of the Code of Virginia. In addition, "funeral supplies and services" does not mean cemetery burial vaults or other outside containers, markers, monuments, urns, merchandise items used for the purpose of memorializing a decedent and placed on or in proximity to a place of interment or entombment of a casket, catafalque, or vault or to a place of inurnment that are sold by a cemetery operating in accordance with Chapter 23.1 of Title 54.1 of the Code of Virginia.

"Guaranteed contract price" means (i) the amount paid by the contract buyer on a preneed funeral contract, and income derived from that amount, or (ii) the amount paid by a contract buyer for a life insurance policy or annuity as the funding source and its increasing death benefit. These amounts shall be accepted as payment in full for the preselected funeral goods and services.

"Income" means the amount of gain received in a period of time from investment of consideration paid for a preneed contract.

"Nonguaranteed contract price" means the costs of items on a preneed funeral contract that are not fixed for the specified funeral goods or funeral services selected and nonguaranteed costs may increase from the date of the contract to the death of the contract beneficiary and the family or estate will be responsible for paying at the time of need for the services and supplies that were nonguaranteed. Cash advance items are not guaranteed.

#### Part II Sale of Preneed Plans

#### 18VAC65-30-50. Solicitation.

- A. In accordance with provisions of § 54.1-2806 of the Code of Virginia, a licensee shall not initiate any preneed solicitation using in-person communication by the licensee, or his agents, assistants, or employees.
- B. After a request to discuss preneed planning is initiated by the contract buyer or interested consumer, any contact and inperson communication shall take place only with a funeral service licensee. Funeral service interns shall not engage in preneed planning or sales.

# Part III Operational Responsibilities

#### 18VAC65-30-60. Records; general.

- A. A licensee shall keep accurate accounts, books, and records of all transactions required by this chapter.
- B. Preneed contracts and reporting documents shall be retained on the premises of the establishment for one year three years after the death of the contract beneficiary.
- C. A funeral home shall keep on file a written verification from the insurance company that the insurance or annuity contract complies with § 54.1-2820 C of the Code of Virginia.
- D. All preneed records shall be available for inspection by the Department of Health Professions.

#### 18VAC65-30-70. Record reporting.

- A. A contract provider shall keep a chronological or an alphabetical listing of all preneed contracts. The listing shall include the following:
  - 1. Name of contract buyer;
  - 2. Name of contract beneficiary;
  - 3. Date of contract;
  - 4. How contract was funded, where the contract is funded, and where the funds are maintained;
  - 5. Whether up to 10% of funds are retained by the contract provider for contracts funded through trust; and
  - 6. Whether funeral goods and supplies are stored for the contract buyer.
- B. A contract provider who that discontinues its business operations, whether by closure or change of ownership, shall notify the board and each existing contract buyer in writingin accordance with the following provisions:

- 1. A contract provider that discontinues its business operations by closure shall:
  - a. Provide to the board a current list of preneed contracts at the time of closure; and
  - b. Notify each existing contract buyer in writing prior to closure and include a statement in the notification regarding the contract buyer's right to change the contract provider at any time prior to at-need.
- 2. If a contract provider changes ownership and the new establishment intends to honor existing contracts, the new establishment shall provide notice of the change of ownership and intent to honor existing contracts in a publication of general circulation in the locality where the establishment is located within 90 days after the change in ownership.
- 3. If a contract provider changes ownership and the new establishment does not intend to honor existing contracts, notification shall be provided to each existing contract buyer in writing within 90 days after the change in ownership. The notice shall include a statement regarding the contract buyer's right to change the contract provider at any time prior to at-need.

#### Part V Disclosures

#### 18VAC65-30-90. Disclosures.

- A. At the time of the inquiry, licensees shall furnish to each person inquiring about preneed arrangements a copy of the general price list and preneed disclosure questions and answers.
- B. Immediately upon concluding the arrangement conference, licensees shall furnish to each person who makes a preneed arrangement a copy of the preneed contract and funding contract. Licensees shall receive a written acknowledgment from the contract buyer that the buyer has received a copy of the general price list and preneed disclosure questions and answers.
- C. An itemized statement of funeral goods and services shall be given at the time of need even if the arrangements were made through a preneed contract.

#### 18VAC65-30-110. Cancellation or transfer of contract.

A. Any person who makes payment under this contract may terminate the agreement at any time prior to the time for which the services or supplies are furnished.

- B. If the contract buyer terminates the contract within 30 days of the execution of the contract, the contract buyer shall be refunded all consideration paid or delivered and any interest or income accrued on it.
- C. If the contract buyer uses a revocable trust as the funding source and terminates the contract after 30 days of the execution of the contract, the contract buyer shall be refunded:
  - 1. All consideration paid or delivered on nonguaranteed items;
  - 2. At least 90% of all consideration paid for guaranteed items; and
  - 3. All interest or income accrued on it.
- D. If the contract buyer uses an irrevocable trust as the funding source, the contract buyer is not able to cancel the trust after 30 days following its execution except in accordance with § §§ 64.2-729 and 64.2-730 of the Code of Virginia.
- E. The contract buyer shall have the right to change the contract provider and the trustee at any time prior to the furnishing of the services or supplies contracted for under the preneed contract.

#### 18VAC65-30-180. Life insurance or annuity.

If a life insurance or annuity policy is used to fund the preneed funeral contract, the contract shall be in compliance with provisions of §§ 38.2-3100.3 and  $54.1-2820 \ \underline{B} \ \underline{C}$  of the Code of Virginia and shall contain the following information:

- 1. Name of the contract provider;
- 2. Name and funeral license number of contract seller;
- 3. Place of employment of contract seller;
- 4. Name of insurance agent and agent's insurance license number;
- 5. Insurance agent's employer and insurance company represented by insurance agent; and
- 6. Identification as to whether the insurance agent is a funeral service licensee and, if so, the funeral service license number.

# Part VIII Required Content of Contracts and Disclosures

#### 18VAC65-30-220. Content of preneed contracts.

The following information shall be contained in any contract for preneed funeral	planning.
Date:	
Contract:	
PRENEED FUNERAL CONTRAC	Γ
for	
(Name of Recipient of Services)	
	_
(Zip)	
I. SUPPLIES AND SERVICES PURCHA	ASED
If the prices of goods and services are guaranteed and your contract is fully additional cost will incur for your family or estate even though the actual prices the date of this contract and the time of need. (Please see the disclosure document	of goods and services may increase between
If goods and services are nonguaranteed, your family or estate may incur additional for these items may increase from the date of the contract to the time of need.	onal costs for goods and services as the prices
Cash advance items are not guaranteed. A cash advance item is any item obtain your behalf. Cash advance items may include cemetery or crematory service honoraria, flowers, musicians or singers, nurses, obituary notices, gratuities, and or	s, pall bearers, public transportation, clergy
Charges are only for those items that you selected or that are required. If we are to use an item, we will explain the reasons in writing below. If you selected a f funeral with a viewing, you may have to pay for embalming. You do not have to select arrangements such as a direct cremation or immediate burial.	uneral that may require embalming, such as a
Guaranteed Services Purchased	
I. BASIC SERVICES OF FUNERAL DIRECTOR AND STAFF	\$
II. FUNERAL HOME FACILITIES	
A. Facilities and Staff for visitation/viewing	\$
B. Facilities and Staff for funeral ceremony	\$
C. Facilities and Staff for memorial service	\$
D. Equipment and Staff for graveside service	\$
(NOTE TO FUNERAL HOME: If you have additional charges such as facilities charge for additional staff person or through calculation of manhours, etc., add he equipment for interment, add here.)	
III. EMBALMING	
A. Normal remains	\$

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B. Autopsy remains

V. IMMEDIATE BURIAL

IV. OTHER PREPARATION OF THE BODY

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(NOTE: List all items that you placed under Other Preparation on your General Price List.)

February 3, 2020

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VI. DIRECT CREMATION	\$	
VII. TRANSFER OF REMAINS TO FUNERAL ESTABLISHMENT	\$	
VIII. FORWARDING REMAINS TO ANOTHER FUNERAL HOME	\$	
IX. RECEIVING REMAINS FROM ANOTHER FUNERAL HOME	\$	
X. AUTOMOTIVE EQUIPMENT		
A. Hearse	\$	
B. Limousine	\$	
(NOTE: List all others that you placed on General Price List.)		
XI. FUNERAL MERCHANDISE		
A. Casket (*describe)		
<del></del>		
	\$	
B. Outer Burial Container (*describe)		
	\$	
C. List any others		
	\$	
Supplies Purchased		
Clothing	\$	
Temporary marker	\$	
Acknowledgment cards	\$	
Register/attendance books	\$	
Memorial folders	\$	
Other	\$	
SUBTOTAL COSTS OF (GUARANTEED) SUPPLIES PURCHASED:	\$	
XII. PACKAGE PRICES		
(NOTE: List all package prices by name.)		
SUBTOTAL COSTS OF (GUARANTEED) SUPPLIES PURCHASED:	\$	
Nonguaranteed Goods and Services Purchased		
The actual prices of goods and services below are NOT GUARANTEED. These items may include, but not be limited to, obituary notices, death certificates, cemetery fees, flowers, sales tax, etc. The prices are estimated and the estimates will be included in the Grand Total Contract Price. The differences between the estimated prices below and the actual cost will be settled with your family or estate at the time of need:		
SUBTOTAL ESTIMATED COSTS OF NONGUARANTEED ITEMS:	\$	
GRAND TOTAL FOR PRENEED ARRANGEMENTS		
1. Total cost of (guaranteed) services purchased	\$	

Red	ıula	tions
	, <b>.</b>	

2. Total cost of (guaranteed) supplies purchased	\$
3. Total estimated cost of nonguaranteed items	\$
GRAND TOTAL	\$
The only warranties, express or implied, granted in connection with the goods sold in this preneed funeral contract, are the express written warranties, if any, extended by the manufacturers thereof. No other warranties and no warranties of MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE are extended by the (funeral home)	
II. GENERAL INFORMATION	
In order that the Buyer may understand the relationship of all parties involved in this preneed arrangement and contract, the following is provided:	
A. Buyer:	
B. Funeral Home Providing Services:	
C. Contract seller:	
Employed by: (Funeral Home)	
Virginia Funeral Director or Funeral Service Licensee License Number:	

#### Method of Funding II. METHOD OF FUNDING

#### A. Insurance

B. A. Trust.

The following information will be given if a trust is used to fund this agreement:

- 1. Amount to be trusted:
- 2. Name of trustee:
- 3. Disposition of Interest:
- 4. Fees, expenses, taxes deducted from earned interest:
- 5. Buyer's responsibility for taxes owned on interest:

#### B. Insurance or annuity contract.

The following information will be given if an insurance policy or annuity contract is used to fund this agreement:

- A. 1. Buyer:
- B. 2. Insurance Company:
- C. 3. Insurance Agent:

Employed by: (Insurance Company)

Licensed Funeral Director or Funeral Service Licensee in Virginia: \_\_\_yes \_\_\_no

Funeral Director or Funeral Service Licensee License Number (If Applicable):

Employed by Funeral Home (If Applicable):

D. 4. The life insurance or annuity contract provides either that:

\_\_\_\_\_ The face value thereof shall be adjusted annually by a factor equal to the Consumer Price Index as published by the Office of Management and Budget of the United States; or

\_\_\_\_\_ A benefit payable at death under such contract that will be equal or exceed the sum of all premiums paid for such contract plus thereon at the annual rate of at least 5.0%, compounded annually.

#### III. CONSUMER INFORMATION

The Board of Funeral Directors and Embalmers is authorized by Chapter 28 (§ 54.1-2800 et seq.) of Title 54.1 of the Code of Virginia to regulate the practice of preneed funeral planning. Consumer complaints should be directed to:

The Board of Funeral Directors and Embalmers

9960 Mayland Drive, Suite 300

Richmond, Virginia 23233

Telephone Number: (804) 367-4479

Toll Free Number for complaints: 1-800-533-1560

FAX: (804) 527-4413

Website: www.dhp.virginia.gov

#### IV. DISCLOSURES

The disclosure statements will be available for your review. The General Price List shall be furnished to you by the contract seller. These contain information that you must receive by law and/or the authority of the Board of Funeral Directors and Embalmers. You are entitled to receive all information in clear and simple language including the language of the funding agreement for this preneed arrangement.

If any law, cemetery, or crematory requires the purchase of any of those items listed in Part I, the requirements will be explained in writing.

By signing this contract, buyer acknowledges availability of and opportunity to read a copy of all of the required documents.

By signing this contract, contract seller acknowledges that the General Price List and the required disclosures have been furnished to the contract buyer.

#### V. TERMINATION OF CONTRACT

This person who funds this contract through a trust agreement may terminate this preneed contract at any time prior to the furnishing of the services or supplies contracted for:

Within 30 days

If you terminate this preneed contract within 30 days of the date of this contract, you will be refunded all payments of whatever type you have made, plus any interest or income you may have earned.

More than 30 days

If you terminate this preneed contract more than 30 days after the date on this contract, you will be refunded whatever amount was required to be placed in a revocable trust fund, plus any interest or income it has earned.

Any person who funds this contract through a trust fund which that is irrevocable or through an insurance/annuity policy or through the transfer of real estate/personal property may not be eligible for a refund.

#### VI. STATEMENT OF GUARANTEE

By signing this contract, (Funeral Home) agrees to the statement checked below (check one):
Prefinancing guarantees that no additional payment will be required from the family or estate for guaranteed service and supplies provided the Grand Total of these arrangements is paid in full and the interest is allowed to accumulate in yo account (see page for Grand Total amount). Payment of the difference will be required for the nonguaranteed estimate items if they increase in price.
The prices for items under supplies and services are not guaranteed.
VII AGREEMENT

In witness whereof, the Buyer and the Funeral Home have executed this contract, intending its terms to be in accordance with the Code of Virginia and any regulations implementing the Code. By signing this contract you acknowledge that you have been provided access to and the opportunity to read the Disclosure Statements.

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### Regulations (Designee of Funeral Home) (Buyer) (Funeral Home) (Contract Date) VIII. PENALTIES OR RESTRICTIONS The (funeral home) \_\_\_\_\_, has the following penalties or restrictions on the provisions of this contract. 1. (Insert geographic restrictions); 2. (Insert an explanation of the Funeral Home's inability to perform the request(s) of the Buyer); 3. (Insert a description of any other circumstances which that apply); 4. (Insert information that if particular goods and services specified in the contract are unavailable at the time of need): A. The funeral home shall be required to furnish supplies and services similar in style and at least equal in quality of material and workmanship; and B. The representative of the deceased shall have the right to choose the supplies or services to be substituted. Addendum to Preneed Contract IX. ADDENDUM TO PRENEED CONTRACT APPOINTEE AGREEMENT \_\_ of (address) \_\_\_\_\_ to assist with the preneed arrangements in my behalf. The relationship of my appointee to me is \_\_\_\_\_\_. Contract Beneficiary: \_\_\_ Date: I accept the request of (contract beneficiary) \_\_\_\_\_\_ to assist with his/her preneed arrangements. \_\_\_\_ Date: \_\_\_\_ The foregoing was acknowledged before me this \_\_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_ 20\_\_\_ Notary: Date Commission Expires: \_\_\_\_\_ the section entitled "General Funding Information" for 18VAC65-30-230. Content of disclosure statements. more information on guaranteed and nonguaranteed costs.) The following disclosure statements shall be provided as a Contracts may be funded by insurance/annuity policies, part of any contract used for preneed funeral planning: trusts, or transfer of real estate/personal property. We are required by law and/or the Virginia Board of Funeral -- What are my protections? Directors and Embalmers to provide access to and the opportunity for you to read the following information to assist You should take your completed preneed contract home you in preplanning. A question and answer format is used for before you sign it and review it with your family or your clarity and includes the most commonly asked questions. legal advisor. You have a right to this review before you sign the contract or pay any money. PRENEED CONTRACTS You should also read carefully the information in this -- Is there more than one type of preneed agreement?

Yes. Guaranteed contracts mean that the costs of certain individual items or the cost of the total package will never be more to your family or estate. Nonguaranteed means contracts mean just the opposite. Nonguaranteed contracts mean costs may increase or decrease between the time of the agreement and the time of need. A preneed contract may have both guaranteed and nonguaranteed costs. (See

You should also read carefully the information in this disclosure statement. If you have any questions, contact the seller for more information or contact your legal advisor.

#### CANCELLATION

-- Can I cancel my preneed agreement if I change my mind? Will I get my money back?

You may cancel payment for supplies or services within 30 days after signing the agreement. If you funded your preneed arrangement through a trust (revocable or

<u>irrevocable</u>), the contract seller will refund all the money you have paid plus any interest or income you have earned.

If you funded your preneed arrangement through a revocable trust and you cancel the preneed contract AFTER the 30-day deadline, you will be refunded all of your money on the items that are not guaranteed and 90% of all your money on the items that are guaranteed. You will also receive any interest or income on that amount. A revocable trust is a trust that you can cancel.

There may be a penalty to withdraw money from a revocable trust account which has already been established in your name. If there is, your contract will give you this information. (See the first question under the section entitled "Payment" below.)

If you have funded your preneed arrangement through an irrevocable trust, you will not be able to cancel the trust agreement or receive a refund after 30 days following its execution the signing of the agreement except in accordance with \$ 64.2 729 §§ 64.2-729 and 64.2-730 of the Code of Virginia.

If you funded your preneed arrangement through an insurance policy/annuity contract which will be used at the time of your death to purchase the supplies and services you have selected, you will need to pay careful attention to the cancellation terms and conditions of the policy. You may not be eligible for a refund.

#### **PAYMENT**

-- What happens to my money after the contract is signed?

Your money will be handled in one of several ways. It may be deposited in a separate trust account in your name. The trust account will list a trustee who will be responsible for handling your account. The funeral home you have selected as your beneficiary will also be listed. You have the right to change the funeral home and the trustee of your account prior to receiving the supplies and services under the preneed contract.

Your money may be used to purchase a preneed life insurance policy which may be used to pay for your arrangements upon your death. The proceeds of the policy will be assigned to the funeral home of your choice. You may change the funeral home assignment at any time prior to receiving the supplies and services under the preneed contract.

You may decide to choose a life insurance policy or a trust account that requires regular premium payments and not have to make an up-front, lump sum payment.

-- May I pay for goods and services with real estate or personal property?

Yes. When you pay for these supplies and services in whole or in part with any real estate you may own, the

preneed contract that you sign will be attached to the deed on the real estate and the deed will be recorded in the clerk's office of the circuit court in the city or county where the real estate is located.

If you pay for goods and services with personal property other than cash or real estate, the contract seller; will declare in writing that the property will be placed in a trust until the time of your death and will give you written information on all the terms, conditions, and considerations surrounding the trust. The contract seller will confirm in writing that he has received property.

You may decide not to transfer the title of the personal property to the contract seller of your preneed contract. In this situation, you will have to submit information to the contract seller in writing that you are giving him the property without a title, and describe the property and where it will be kept until the time of your death.

In either case, the written statements will be recorded in the clerk's office of the circuit court of the city or county in which you live. The written statement does not have to be a separate document.

#### GENERAL FUNDING INFORMATION

-- If the prices of the goods and services are affected by inflation between now and my death, will the funding I choose be adjusted accordingly?

There is a possibility that the funding may fail to keep up with inflation. This could mean that the funding you choose could have insufficient may not have enough value to cover all expenses at the time of need.

-- What happens if my funding is not enough to cover the full cost of these arrangements?

If the entire funeral or specific items in the agreement are guaranteed by the contract seller, your family or estate will not have to pay any more for those items provided that you have paid the grand total in full and all interest earned is allowed to accumulate in your account. However, if you have not paid the account in full and have not allowed the interest to accumulate in the account and any items increase in price, your family or estate would be responsible for the extra amount if the funds are not sufficient. In some situations where you pay toward your funding with regular premiums rather than in one lump sum, your account may not be enough at the time of your death to cover everything.

-- What happens to the extra money if my funding is more than what is needed to pay for these arrangements?

Sometimes, as explained in the answer above, your funding account may not have had the time to grow sufficiently before your death to cover items which are guaranteed in

price to you, yet have increased in price for the funeral home.

After funeral expenses are paid, there may be money left over. Because of the ongoing risk that a funeral home takes in guaranteeing prices for you, the funeral home may not be required to return this excess money.

Some funding agreements and funeral homes, however, require that extra money be returned to the estate or family. Others do not. You should obtain information concerning this in writing before signing the preneed contract.

The answers to the following questions will depend upon the terms and conditions of the individual's funding and preneed agreements.

Please review your preneed contract and/or funding agreement for answers to these questions.

-- What happens to my preneed contract if I change my assignment from one funeral home to another?

(Funeral home shall place answer here)

-- What happens to my preneed contract if I change the beneficiary of my funding or the use of my proceeds from the funding.

If you make such changes, it could void your contract. You should request specific information from the contract seller and the funding arrangement.

-- What will happen to my preneed contract if I fail to make agreed to premium payments to my funding source?

(Funeral home shall place answer here)

-- Do I get any money back if I surrender or cancel my funding arrangements?

(Funeral home shall place answer here)

-- What happens if the funeral home closes? Will I be able to transfer my contract to another funeral home?

You have the right to change the funeral home (contract provider) at any time prior to receiving services or supplies under the preneed contract. A funeral home is required to notify you in writing if it closes or is sold to a buyer that does not intend to honor your preneed contract.

#### TRUST ACCOUNT

-- If my money goes into a trust account, what information will I receive about that account?

If you want your money to go into a trust fund, the trust agreement must furnish you with information about the amount to be deposited into the account, the name of the trustee, information about what happens to the interest your trust account will earn, and information about your responsibility to file and pay taxes on that interest.

If there are filing expenses connected with your trust account, you will be notified what the expenses are and whether you or the contract seller is the responsible party for paying those.

-- What happens to the interest earned by the trust?

The interest earned by the trust may be handled in different ways by different trust arrangements. The interest may have to go back into your account if items on your contract are guaranteed. You may be responsible for reporting that interest to the Internal Revenue Service and paying taxes on it. You will be responsible to pay any taxes on the interest earned even if you cancel your trust account.

Some trust accounts cannot be cancelled.

There may be special fees deducted from your interest. However, you may still be responsible for paying taxes on the entire amount of interest earned before the fees were deducted. Please ask your contract seller for a written list of any fees so you will have a clear understanding about them before you sign the contract.

-- If I pay my trust in premium payments, what happens if I die before the grand total of the funeral has been placed in trust?

(Funeral home shall place answer here)

#### CLAIMS AGAINST THIS CONTRACT

-- Can someone to whom I owe money make a claim against the money, personal property, or real estate that I have used to pay for this contract?

No. This money or property cannot be used to settle a debt, a bankruptcy, or resolve a claim. These funds cannot be garnished.

-- Can the money or property be taxed?

No. Currently, interest earned on the money you deposit in a trust, savings account, or the value of the property you used for payment can be taxed but not the original amount which you invested. Interest earned on annuities is generally deferred until withdrawal.

#### GENERAL GOODS AND SERVICES

-- If I choose goods and services that might not be available at the time of my death, what is the provider required to do?

The funeral home which that you select is required to furnish supplies and services that are similar in style and equal in value and quality if what you choose is no longer made or is not available at the time of your death.

Your representative or next-of-kin will have the right to choose the supplies or services to be substituted. However, if the substitute is more expensive than the item originally selected by you, your designee or next-of-kin would be responsible for paying the difference. Under no

circumstances will the funeral establishment be allowed to substitute lesser goods and services than the ones you chose.

If, before your death, the funeral home goes out of business or is otherwise unable to fulfill its obligation to you under the preneed contract, you have the right to use the proceeds at the funeral home of your choice.

If the inability to provide services does not become apparent until the time of your death, the individual that you named as your designee could use the funds for services at another funeral home.

-- May I choose the exact item I want now and have the funeral home store it until my death?

If the funeral home or supplier has a storage policy you may ask for this service. If the funeral home or contract seller agrees to store these items, the risk of loss or damage shall be upon the funeral home during the storage period.

For example, what would happen if you select a casket which that is in-stock at the time you make these arrangements and the funeral home or supplier agrees to store it for you in their warehouse and: (i) damage occurs, (ii) the funeral home or supplier goes out of business, (iii) the funeral home or supplier is sold, etc.? You need to be assured in writing of protection in these types of situations.

-- What happens if I choose to have a unique service that is not customary or routine in my community? Must the funeral home comply with my wishes?

The funeral home which you have chosen to conduct your service may be able to only provide certain types of services. They may not be able to fulfill your request. If there is a restriction on what they can provide, you will be notified in writing before you sign the preneed contract.

If the funeral home agrees in writing before you sign the contract to perform such services, the funeral home shall provide you a written, itemized statement of fees which you will be charged.

-- Will the funeral home agree to transport my body to another area for burial?

Again, the funeral home may have restrictions on the distance they are willing to travel to conduct a burial. If restrictions apply, you will be notified in writing.

If the funeral home agrees in writing before you sign the contract to honor your wishes, the funeral home shall provide you a written, itemized statement of any penalties (fees) which you will be charged.

-- I may die and be buried in a city other than one where the funeral home that I select for my goods and services is located. Will the funeral home that I select under this contract

deliver my merchandise to the city where I die and am to be buried?

This is entirely up to the funeral home to decide. If the funeral home has restrictions on this, they will notify you in writing. If they agree to ship merchandise to another area for your funeral, you will be notified before signing this contract of the fees involved if they can be determined and guaranteed at this time.

However, the preneed contract arrangements and funding is considered portable. This means that they are available for transfer from one locality to another. It is unusual for actual goods and merchandise to be transferred.

#### **PRICING**

-- How will I know that the prices of items which I select are the same for everyone?

The funeral home maintains a general price list and a casket and outer burial container price list. Your contract seller will give this to you before you begin talking about arrangements. After your discussion is finished, you will be given a copy of your preneed contract on which charges will be listed. Charges will only be made for the items you select. If there are any legal or other requirements that mandate that you must buy any items you did not specifically ask for, the contract seller will explain the reason for the charges to you in writing.

You may ask a funeral home to purchase certain items or make special arrangements for you. If the funeral home charges you for these services, you will receive an explanation in writing. The charges to you for these services may be higher than if you or your family purchased them directly.

At the time of your death, your family or estate will be given an itemized statement which will list all of the specific charges.

-- What is meant by guaranteed and nonguaranteed prices?

Some contract sellers may agree that certain prices are guaranteed. Some may guarantee the price of the total package. Other funeral homes may not guarantee any prices.

Guaranteed prices are those that will not increase for your family or estate at the time of your death, provided your preneed contract is fully paid for or funded at the time of your death. Basically, this means that your funeral arrangement for those items will be covered by and will not exceed your funding and the interest it earns.

Nonguaranteed prices are those which might increase or decrease. The nonguaranteed prices may be written in at the time of this contract with you your understanding that the price is an estimate only and may increase or decrease. A settlement to that effect of any difference in the

estimated cost and the actual cost at death may have to be made with your family or representative after your death. Examples of prices that are often not guaranteed include cemetery or crematory services, pallbearers, public transportation, clergy honoraria, flowers musicians or singers, obituary notices, gratuities, and death certificates.

-- Can the contract seller and I negotiate a projected charge for the nonguaranteed items based on the rate of inflation?

It is entirely up to the contract seller to inform you of the funeral home policy in that regard.

#### CASKETS AND CONTAINERS

-- Do I have to buy a vault or a container to surround the casket in the grave?

In most areas of the country, state and local laws do not require that you buy a container to surround the casket in the grave. However, many cemeteries ask that you have such a container to support the earth above the grave. Either a burial vault or a grave liner will satisfy if such requirements exist.

-- Is a casket required?

A casket is not required for direct cremation. If you want to arrange a direct cremation, you may use an unfinished wood box or an alternative container made of heavy cardboard or composition materials. You may choose a canvas pouch.

-- Do certain cemeteries and crematoriums have special requirements?

Particular cemeteries and crematoriums may have policies requiring that certain goods and services be purchased. If you decide not to purchase goods and services required by a particular cemetery or crematorium, you have the right to select another location that has no such policy.

#### **EMBALMING**

-- Is embalming always required?

Except in certain special cases, embalming Embalming is not required by law. Embalming may be necessary, however, if you select certain funeral arrangements such as viewing or visitation with an open casket. You do not have to pay for embalming you did not approve if you select arrangements such as a direct cremation or immediate burial. If the funeral home must charge to conduct an embalming, your designee will be notified of the reasons in writing.

#### RECORDS

-- What should I do with my preneed contract and documents?

A preneed contract is a legal document. You should keep a copy of your preneed contract and related documentation

as you would any similar legal document such as in a safe place or with the person designated to make arrangements at the time of your death.

-- Will the funeral home keep a copy of the preneed contract?

The funeral home is required to maintain a copy of the preneed contract on file prior to and after need. Preneed contracts and related documents are required to be kept by the funeral home for three years after your death.

#### ASSISTANCE

-- This is all very confusing to me. May I pick someone close to me to help with all of this? May this person also work with the funeral home to ensure that my wishes as written in the preneed contract are carried out?

You may designate in writing a person of your choice to work with the funeral home and contract seller either before or after your death to ensure that your wishes are fulfilled. You must sign the statement and have it notarized. The person that you designate must agree to this in writing. Under the laws governing preneed contracts, the individual whom you designate has final authority at the time of your death.

-- Where can I complain if I have a problem concerning my preneed contract, the contract seller, or the funeral home?

You may direct your complaints or concerns to:

The Board of Funeral Directors and Embalmers

9960 Mayland Drive, Suite 300

Richmond, Virginia 23233

Telephone Number: (804) 367-4479

Toll Free Number for complaints: 1-800-533-1560

Fax: (804) 527-4413

Website: www.dhp.virginia.gov

VA.R. Doc. No. R19-5826; Filed January 8, 2020, 8:44 a.m.

#### **BOARD OF NURSING**

#### Final Regulation

<u>Title of Regulation:</u> 18VAC90-40. Regulations for Prescriptive Authority for Nurse Practitioners (amending 18VAC90-40-20, 18VAC90-40-55, 18VAC90-40-70, 18VAC90-40-110; repealing 18VAC90-40-50, 18VAC90-40-60).

<u>Statutory Authority:</u> §§ 54.1-2400 and 54.1-2957.1 of the Code of Virginia.

Effective Date: March 4, 2020.

Agency Contact: Jay P. Douglas, R.N., Executive Director, Board of Nursing, 9960 Mayland Drive, Suite 300, Richmond, VA 23233-1463, telephone (804) 367-4520, FAX (804) 527-4455, or email jay.douglas@dhp.virginia.gov.

#### Summary:

The amendments eliminate the requirement for renewal of prescriptive authority for a nurse practitioner and reduce the fee for an application for prescriptive authority to \$35.

<u>Summary of Public Comments and Agency's Response:</u> No public comments were received by the promulgating agency.

# 18VAC90-40-20. Authority and administration of regulations.

- A. The statutory authority for this chapter is found in §§ 54.1-2957.01, 54.1-3303, 54.1-3401, and 54.1-3408 of the Code of Virginia.
- B. Joint boards of nursing and medicine.
- 1. The Committee of the Joint Boards of Nursing and Medicine shall be appointed to administer this chapter governing prescriptive authority.
- 2. The boards hereby delegate to the Executive Director of the Virginia Board of Nursing the authority to issue the initial authorization and biennial renewal to those persons who meet the requirements set forth in this chapter and to grant extensions or exemptions for compliance with continuing competency requirements as set forth in subsection E of 18VAC90-40-55. Questions of eligibility shall be referred to the committee.
- 3. All records and files related to prescriptive authority for nurse practitioners shall be maintained in the office of the Board of Nursing.

# 18VAC90-40-50. Renewal of prescriptive authority. (Repealed.)

An applicant for renewal of prescriptive authority shall:

- 1. Renew biennially at the same time as the renewal of licensure to practice as a nurse practitioner in Virginia.
- 2. Submit a completed renewal form attesting to compliance with continuing competency requirements set forth in 18VAC90 40 55 and the renewal fee as prescribed in 18VAC90 40 70.

#### 18VAC90-40-55. Continuing competency requirements.

A. In order to renew prescriptive authority, a A licensee with prescriptive authority shall meet continuing competency requirements for biennial renewal as a licensed nurse practitioner. Such requirements shall address issues such as ethical practice, an appropriate standard of care, patient safety, and appropriate communication with patients.

- B. A nurse practitioner with prescriptive authority shall obtain a total of eight hours of continuing education in pharmacology or pharmacotherapeutics for each biennium in addition to the minimal requirements for compliance with subsection B of 18VAC90-30-105.
- C. The nurse practitioner with prescriptive authority shall retain evidence of compliance and all supporting documentation for a period of four years following the renewal period for which the records apply.
- D. The boards shall periodically conduct a random audit of its their licensees to determine compliance. The nurse practitioners selected for the audit shall provide the evidence of compliance and supporting documentation within 30 days of receiving notification of the audit.
- E. The boards may delegate to the committee the authority to grant an extension or an exemption for all or part of the requirements for circumstances beyond the control of the licensee, such as temporary disability, mandatory military service, or officially declared disasters.

# 18VAC90-40-60. Reinstatement of prescriptive authority. (Repealed.)

- A. A nurse practitioner whose prescriptive authority has lapsed may reinstate within one renewal period by payment of the current renewal fee and the late renewal fee.
- B. A nurse practitioner who is applying for reinstatement of lapsed prescriptive authority after one renewal period shall:
  - 1. File the required application;
  - 2. Provide evidence of a current, unrestricted license to practice as a nurse practitioner in Virginia;
  - 3. Pay the fee required for reinstatement of a lapsed authorization as prescribed in 18VAC90 40 70; and
  - 4. If the authorization has lapsed for a period of two or more years, the applicant shall provide proof of:
    - a. Continued practice as a licensed nurse practitioner with prescriptive authority in another state; or
    - b. Continuing education, in addition to the minimal requirements for current professional certification, consisting of four contact hours in pharmacology or pharmacotherapeutics for each year in which the prescriptive authority has been lapsed in the Commonwealth, not to exceed a total of 16 hours.
- C. An applicant for reinstatement of suspended or revoked authorization shall:
  - 1. Petition for reinstatement and pay the fee for reinstatement of a suspended or revoked authorization as prescribed in 18VAC90 40 70;
  - 2. Present evidence of competence to resume practice as a nurse practitioner with prescriptive authority; and

3. Meet the qualifications and resubmit the application required for initial authorization in 18VAC90 40 40.

#### 18VAC90-40-70. Fees for prescriptive authority.

A. The following fees have been established by the boards:

1. Initial issuance of prescriptive authority	\$75 \$35
2. Biennial renewal	<del>\$35</del>
3. Late renewal	<del>\$15</del>
4. Reinstatement of lapsed authorization	<del>\$90</del>
5. Reinstatement of suspended or revoked authorization	<del>\$85</del>
6. Duplicate of authorization	<del>\$15</del>
7-2. Return check charge	\$35

B. For renewal of licensure from July 1, 2017, through June 30, 2019, the following fee shall be in effect:

Biennial renewal \$26

#### 18VAC90-40-110. Disclosure.

A. The nurse practitioner shall include on each prescription written issued or dispensed his signature and the Drug Enforcement Administration (DEA) number, when applicable. If his the nurse practitioner's practice agreement authorizes prescribing of only Schedule VI drugs and the nurse practitioner does not have a DEA number, he shall include the prescriptive authority number as issued by the boards.

B. The nurse practitioner shall disclose to patients at the initial encounter that he is a licensed nurse practitioner. Such disclosure may be included on a prescription pad or may be given in writing to the patient.

C. The nurse practitioner shall disclose, upon request of a patient or a patient's legal representative, the name of the patient care team physician and information regarding how to contact the patient care team physician.

VA.R. Doc. No. R18-5352; Filed January 7, 2020, 7:15 p.m.

#### **BOARD OF OPTOMETRY**

#### **Final Regulation**

<u>Title of Regulation:</u> 18VAC105-20. Regulations Governing the Practice of Optometry (amending 18VAC105-20-20, 18VAC105-20-70; adding 18VAC105-20-61).

Statutory Authority: § 54.1-2400 of the Code of Virginia.

Effective Date: March 4, 2020.

Agency Contact: Leslie L. Knachel, Executive Director, Board of Optometry, 9960 Mayland Drive, Suite 300,

Richmond, VA 23233, telephone (804) 597-4130, FAX (804) 527-4471, or email leslie.knachel@dhp.virginia.gov.

#### **Summary:**

The amendments enable the board to issue inactive licenses.

<u>Summary of Public Comments and Agency's Response:</u> No public comments were received by the promulgating agency.

#### 18VAC105-20-20. Fees.

A. Required fees.

Initial application and licensure (including TPA certification)	\$250
Annual licensure renewal without TPA certification	\$150
Annual licensure renewal with TPA certification	\$200
Annual renewal of inactive license	<u>\$100</u>
Late renewal without TPA certification	\$50
Late renewal with TPA certification	\$65
Late renewal of inactive license	<u>\$35</u>
Returned check	\$35
Professional designation application	\$100
Annual professional designation renewal (per location)	\$50
Late renewal of professional designation	\$20
Reinstatement application fee (including renewal and late fees)	\$400
Reinstatement application after disciplinary action	\$500
Duplicate wall certificate	\$25
Duplicate license	\$10
Licensure verification	\$10

- B. Unless otherwise specified, all fees are nonrefundable.
- C. From October 31, 2018, to December 31, 2018, the following fees shall be in effect:

Annual licensure renewal without TPA certification	\$75
Annual licensure renewal with TPA certification	\$100
Annual professional designation renewal (per location)	\$25

#### 18VAC105-20-61. Inactive licensure; reactivation.

- A. An optometrist who holds a current, unrestricted license in Virginia may, upon a request on the renewal application and submission of the required fee, be issued an inactive license. The holder of an inactive license shall not be required to maintain continuing education requirements and shall not perform any act requiring a license to practice optometry in Virginia.
- B. A licensee whose license has been inactive and who requests reactivation [ of to ] an active license shall file an application, pay the difference between the inactive and active renewal fees for the current year, and provide documentation of having completed continuing education hours equal to the requirement for the number of years in which the license has been inactive, not to exceed 40 contact hours.

#### 18VAC105-20-70. Requirements for continuing education.

- A. Each license renewal <u>of an active license</u> shall be conditioned upon submission of evidence to the board of 20 hours of continuing education taken by the applicant during the previous license period. A licensee who completes more than 20 hours of continuing education in a year shall be allowed to carry forward up to 10 hours of continuing education for the next annual renewal cycle.
  - 1. The 20 hours may include up to two hours of recordkeeping for patient care, including coding for diagnostic and treatment devices and procedures or the management of an optometry practice, provided that such courses are not primarily for the purpose of augmenting the licensee's income or promoting the sale of specific instruments or products.
  - 2. For optometrists who are certified in the use of therapeutic pharmaceutical agents, at least 10 of the required continuing education hours shall be in the areas of ocular and general pharmacology; diagnosis and treatment of the human eye and its adnexa, including treatment with new pharmaceutical agents; new or advanced clinical devices, techniques, modalities, or procedures; or pain management.
  - 3. At least 10 hours shall be obtained through real-time, interactive activities, including in-person or electronic presentations, provided that during the course of the presentation, the licensee and the lecturer may communicate with one another.
  - 4. A licensee may also include up to two hours of training in cardiopulmonary resuscitation (CPR).
  - 5. Two hours of the 20 hours required for annual renewal may be satisfied through delivery of professional services, without compensation, to low-income individuals receiving health services through a local health department or a free clinic organized in whole or primarily for the delivery of

- those services. One hour of continuing education may be credited for three hours of providing such volunteer services, as documented by the health department or free clinic.
- B. Each licensee shall attest to fulfillment of continuing education hours on the required annual renewal form. All continuing education shall be completed prior to the renewal deadline unless an extension has been granted by the Continuing Education Committee. A request for an extension shall be received prior to the renewal deadline of each year.
- C. All continuing education courses shall be offered by an approved sponsor or accrediting body listed in subsection H of this section. Courses that are not approved by a board-recognized sponsor in advance shall not be accepted for continuing education credit. For those courses that have a post-test requirement, credit will only be given if the optometrist receives a passing grade as indicated on the certificate.
- D. Licensees shall maintain continuing education documentation for a period of not less than three years. A random audit of licensees may be conducted by the board which will require that the licensee provide evidence substantiating participation in required continuing education courses within 30 days of the audit notification.
- E. Documentation of hours shall clearly indicate the name of the continuing education provider and its affiliation with an approved sponsor or accrediting body as listed in subsection H of this section. Documents that do not have the required information shall not be accepted by the board for determining compliance. Correspondence courses shall be credited according to the date indicated on the continuing education certificate.
- F. A licensee shall be exempt from the continuing competency requirements for the first renewal following the date of initial licensure by examination in Virginia.
- G. The board may grant an exemption for all or part of the requirements for circumstances beyond the control of the licensee, such as temporary disability, mandatory military service, or officially declared disasters.
- H. An approved continuing education course or program, whether offered by correspondence, electronically, or in person, shall be sponsored, accredited, or approved by one of the following:
  - 1. The American Optometric Association and its constituent organizations.
  - 2. Regional optometric organizations.
  - 3. State optometric associations and their affiliate local societies.
  - 4. Accredited colleges and universities providing optometric or medical courses.

- 5. The American Academy of Optometry and its affiliate organizations.
- 6. The American Academy of Ophthalmology and its affiliate organizations.
- 7. The Virginia Academy of Optometry.
- 8. Council on Optometric Practitioner Education (COPE).
- 9. State or federal governmental agencies.
- 10. College of Optometrists in Vision Development.
- 11. The Accreditation Council for Continuing Medical Education of the American Medical Association for Category 1 credit.
- 12. Providers of training in cardiopulmonary resuscitation (CPR).
- 13. Optometric Extension Program.
- I. In order to receive credit for continuing education courses, a licensee shall submit a certificate that shows:
  - 1. The date, location, presenter or lecturer, content hours of the course, and contact information of the provider or sponsor for verification. The certificate of attendance shall be based on verification by the sponsor of the attendee's presence throughout the course, either provided by a posttest or by a designated monitor.
  - 2. Whether the course was in real-time and interactive, including in-person or electronic presentations.
- J. Falsifying the attestation of compliance with continuing education on a renewal form or failure to comply with continuing education requirements may subject a licensee to disciplinary action by the board, consistent with § 54.1-3215 of the Code of Virginia.

VA.R. Doc. No. R18-13; Filed January 7, 2020, 7:17 p.m.

#### **BOARD OF PHARMACY**

#### **Proposed Regulation**

<u>Title of Regulation:</u> 18VAC110-20. Regulations Governing the Practice of Pharmacy (amending 18VAC110-20-275).

Statutory Authority: §§ 54.1-2400 and 54.1-3307 of the Code of Virginia.

**Public Hearing Information:** 

March 24, 2020 - 9 a.m. - Department of Health Professions, Board Room 4, Perimeter Center, 9960 Mayland Drive, Suite 201, Henrico, VA 23233.

Public Comment Deadline: April 3, 2020.

Agency Contact: Caroline Juran, RPh, Executive Director, Board of Pharmacy, 9960 Mayland Drive, Suite 300,

Richmond, VA 23233-1463, telephone (804) 367-4456, FAX (804) 527-4472, or email caroline.juran@dhp.virginia.gov.

<u>Basis:</u> Regulations are promulgated under the general authority of Chapter 24 of Title 54.1 of the Code of Virginia. Section 54.1-2400 provides the Board of Pharmacy the authority to promulgate regulations to administer the regulatory system. The specific authority for the board to regulate the dispensing of prescription drugs is found in § 54.1-3307 of the Code of Virginia.

<u>Purpose</u>: The purpose of the proposed regulatory action is to respond to a petition for rulemaking from CVS Health to eliminate a requirement for a pharmacy that is only holding a prescription for pick-up or delivery to a consumer to be identified on the prescription label. The petitioner noted that identification of multiple pharmacies is confusing; the dispensing pharmacy is best able to answer questions and respond to problems or concerns by a patient about the patient's medication. The board believes an amendment to its regulation will safeguard patient health and safety by ensuring that a prescription label has pertinent information.

<u>Substance</u>: An amendment to 18VAC110-20-275 would specify that a unique identifier on the prescription label is not required to identify a pharmacy that is solely involved in the holding of a prescription for pick-up or further delivery when that pharmacy has not shared in other filling or dispensing functions.

<u>Issues:</u> Some commenters, such as Rx Partnership, believe the amendment is advantageous to the public, especially many low-income and uninsured patients who experience transportation challenges and would be able to receive medications at a preferred pharmacy rather than the pharmacy where the prescription was filled.

Others have expressed concern that patients, particularly senior citizens, might want the information about the pharmacy where the prescription was being picked up, as well as the pharmacy where it was filled. To address those concerns, letters were sent directly to consumer groups and senior advocacy groups explaining the possible amendment and requesting comment. None was received. The groups were: Virginia Citizens Consumer Council, Virginia Association of Area Agencies on Aging, Virginia Navigators, Senior Connections, and AARP Virginia.

There are no advantages or disadvantages to this agency or the Commonwealth.

Department of Planning and Budget's Economic Impact Analysis:

Summary of the Proposed Amendments to Regulation. The Board of Pharmacy (Board) proposes to amend 18VAC110-20 Regulations Governing the Practice of Pharmacy (regulation) in order to clarify the Board's interpretation of the labeling requirements in response to a petition for

rulemaking filed by Joseph Lavino, Legal Counsel of Pharmacy Regulatory Affairs for CVS Health in September 2017.<sup>2</sup> Specifically, the Board seeks to amend 18VAC110-20-275 by adding that, "A unique identifier on the prescription label is not required to identify a pharmacy solely involved in the holding of a prescription for pick-up or further delivery when that pharmacy has not shared in other filling or dispensing functions."<sup>3</sup> The proposed addition would reduce the amount of detailed information that pharmacies are currently expected to include on limited prescription label space, making it easier for pharmacies to comply with the labeling requirements.

Background. In response to the petition for rulemaking, the Board seeks to clarify that a unique identifier on the prescription label is not required to identify a pharmacy solely involved in holding a prescription for pick-up or further delivery when that pharmacy does not share in other filling or dispensing functions. As per current regulation, pharmacies are required to (i) formulate their own policy regarding their prescription labels, including a procedure to identify "all pharmacies involved in filling and dispensing the prescription," (ii) administer the policy via a current "policy and procedure manual" and (iii) maintain adherence to their own policies and procedures as laid out in their manual.<sup>4</sup>

According to the Department of Health Professions (DHP), the Board heretofore interpreted 18VAC110-20-275 as applying to every pharmacy involved in "drug delivery." As a result, the Board expected that pharmacies that only receive and hold a prescription for the consumer to pick up would be identified, not just pharmacies that fill and dispense the prescription. However, the petitioner noted that identification of multiple pharmacies is confusing and that the dispensing pharmacy is best able to answer questions and respond to patients' questions or concerns. 6

Estimated Benefits and Costs. As of this writing, CVS Health operates 344 pharmacy locations in Virginia and relies on the size of their network to optimize inventory management: some prescriptions are filled by CVS' specialty pharmacies and then sent to local CVS pharmacies. This allows customers to pick up their medications at a store location that suits their convenience, while also having the address and phone number of the dispensing pharmacy should they have any questions or concerns.<sup>7</sup> The proposed amendment would allow CVS to continue filling and delivering prescriptions without having to change their labeling procedures. They would also not risk being cited during routine pharmacy inspections for not meeting the Board's labeling requirements. Thus CVS and their customers would benefit from maintaining the status quo without having to incur any additional costs. Further, other pharmacy chains that may have been found to be in violation of the labeling requirements for not identifying the delivering pharmacy on their labels would also benefit from not having to make changes. Independent pharmacies or pharmacies belonging to

local chains may not be affected by the proposed amendment if they fill prescriptions which are picked up at the same location.<sup>8</sup>

Pharmacies that have currently been including information to identify both the dispensing as well as the delivering pharmacy on their labels would not be affected, as the proposed amendment would not require them to change their labeling procedures. However, they may choose to discontinue including identifying information about the delivering pharmacy, which could benefit their customers if it makes the label easier to read and less confusing.

Comments received at the NOIRA stage pointed out the potential benefits of dispensing with the requirement to identify pharmacies that are merely holding a prescription for pick-up. A comment made on behalf of CVS Health noted that the Institute for Safe Medication Practices, which has published guidelines for medication labels, suggests that "maximizing the use of white space on a label would improve medication adherence and reduce inadvertent medication errors."9 Older adults and adults with visual impairments have reported a strong subjective preference for larger print size and the use of uppercase letters to denote numeric information on prescription labels. 10 This is especially relevant given that 80 percent of older adults in the U.S. (and 90 percent of Medicare beneficiaries) take at least one daily prescription.<sup>11</sup> Hence, the proposed amendment could benefit older adults and adults with visual impairments to the extent that a reduction in the amount of information required on the label leads pharmacies to design labels that are easier to read.

Another commenter in support of the Board's action pointed out that mail order pharmacies sometimes put a customer service number on the label, rather than the number of the pharmacy. While it can be confusing to the consumer to have multiple phone numbers on the prescription label, the commenter recommended prioritizing information regarding where the prescription was filled and how to contact the pharmacist directly. 12 Rx Partnership (a nonprofit working to increase medication access) commented in support of the initial petition saying it would increase efficiency and make it easier to provide prescriptions for individuals who need a convenient location for pick-up that may not be where the prescription was filled.<sup>13</sup> Hence, consumers of prescription medications stand to benefit as long as the proposed amendment would at least preserve, if not increase, the clarity of information regarding whom to contact with questions, while also enabling more efficient delivery systems and convenient pick-up locations.

Businesses and Other Entities Affected. The proposed amendment would affect pharmacies that are either operated as part of larger chains or belong to pharmacy networks, to the extent that prescriptions filled at one pharmacy are delivered to the customer at a different pharmacy. The proposal would not increase costs for any entities.

Localities<sup>14</sup> Affected.<sup>15</sup> The proposed amendments do not introduce new costs for local governments and are unlikely to affect any locality in particular.

Projected Impact on Employment. The proposed amendments are unlikely to have any impact on employment.

Effects on the Use and Value of Private Property. The proposed amendments are unlikely to affect the use and value of private property. Real estate development costs are not affected.

Adverse Effect on Small Businesses:<sup>16</sup> The proposed amendments are unlikely to have an adverse impact on any small business. As mentioned previously, independent pharmacies are unlikely to be affected at all, unless they participate in contractual arrangements with other pharmacies to fill and deliver prescriptions across multiple locations, in which case they would benefit from the greater flexibility allowed by the proposed amendment.

<sup>7</sup>DHP also helpfully pointed out that customers do not need the location of the pharmacy where they picked up the prescription to be on the label, because they just went there to pick it up.

<sup>8</sup>However, if they participate in any prescription networks or have any reciprocal contracts with other pharmacies and have only been identifying the pharmacy that fills the prescription, they too would benefit in the same way as CVS and other pharmacy chains.

<sup>9</sup>The commenter also noted that there would still be an audit trail to track the prescription, and information provided to the patient to answer any questions or provide any counseling. See p.7 of the ABD, https://townhall.virginia.gov/l/GetFile.cfm?File=30\5093\8779\AgencyState ment\_DHP\_8779\_v2.pdf.

 $^{15} \mbox{\it \$} \mbox{\it 2.2-4007.04}$  defines "particularly affected" as bearing disproportionate material impact.

<sup>16</sup>Pursuant to § 2.2-4007.04 of the Code of Virginia, small business is defined as "a business entity, including its affiliates, that (i) is independently owned and operated and (ii) employs fewer than 500 full-time employees or has gross annual sales of less than \$6 million."

<u>Agency's Response to Economic Impact Analysis:</u> The Board of Pharmacy concurs with the analysis of the Department of Planning and Budget.

#### Summary:

The proposed amendments specify that a unique identifier on the prescription label is not required to identify a pharmacy solely involved in the holding of a prescription for pick-up or further delivery when that pharmacy has not shared in other filling or dispensing functions. The amendments are in response to a petition for rulemaking from December 11, 2017.

#### 18VAC110-20-275. Delivery of dispensed prescriptions.

A. Pursuant to § 54.1-3420.2 B of the Code of Virginia, in addition to direct hand delivery to a patient or patient's agent or delivery to a patient's residence, a pharmacy may deliver a dispensed prescription drug order for Schedule VI controlled substances to another pharmacy, to a practitioner of the healing arts licensed to practice pharmacy or to sell controlled substances, or to an authorized person or entity holding a controlled substances registration issued for this purpose in compliance with this section and any other applicable state or federal law. Prescription drug orders for Schedule II through Schedule V controlled substances may not be delivered to an alternate delivery location unless such delivery is authorized by federal law and regulations of the board.

#### B. Delivery to another pharmacy.

- 1. One pharmacy may fill prescriptions and deliver the prescriptions to a second pharmacy for patient pickup pickup or direct delivery to the patient provided the two pharmacies have the same owner, or have a written contract or agreement specifying the services to be provided by each pharmacy, the responsibilities of each pharmacy, and the manner in which each pharmacy will comply with all applicable federal and state law.
- 2. Each pharmacy using such a drug delivery system shall maintain and comply with all procedures in a current policy and procedure manual that includes the following information:
- a. A description of how each pharmacy will comply with all applicable federal and state law;
- b. The procedure for maintaining required, retrievable dispensing records to include which pharmacy maintains the hard-copy prescription, which pharmacy maintains the active prescription record for refilling purposes, how each pharmacy will access prescription information

<sup>&</sup>lt;sup>2</sup>See https://townhall.virginia.gov/L/viewpetition.cfm?petitionid=262

<sup>&</sup>lt;sup>3</sup>See https://law.lis.virginia.gov/admincode/title18/agency110/chapter20/section275/

<sup>&</sup>lt;sup>4</sup>18VAC110-20-275 B 2 currently states that "Each pharmacy using such a drug delivery system shall maintain and comply with all procedures in a current policy and procedure manual that includes the following information" with subdivision d requiring "The procedure for identifying on the prescription label all pharmacies involved in filling and dispensing the prescription." (https://law.lis.virginia.gov/admincode/title18/agency110/chapter20/section275/)

<sup>&</sup>lt;sup>5</sup>DHP provided this explanation regarding "the Board's interpretation" via phone communication.

 $<sup>^6</sup> See~p.~3~https://townhall.virginia.gov/l/GetFile.cfm?File=30\5093\8779\AgencyStatement_DHP_8779_v2.pdf$ 

<sup>&</sup>lt;sup>10</sup>See https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4860753/.

<sup>&</sup>lt;sup>11</sup>See https://bemedwise.org/health-education-resources/older-adults and https://bemedwise.org/documents/must\_factsheet.pdf.

<sup>&</sup>lt;sup>12</sup>See https://townhall.virginia.gov/l/viewcomments.cfm?commentid=68800.

<sup>&</sup>lt;sup>13</sup>See https://townhall.virginia.gov/l/viewcomments.cfm?commentid=63283.

<sup>14&</sup>quot;Locality" can refer to either local governments or the locations in the Commonwealth where the activities relevant to the regulatory change are most likely to occur.

necessary to carry out its assigned responsibilities, method of recordkeeping for identifying the pharmacist or pharmacists responsible for dispensing the prescription and counseling the patient, and how and where this information can be accessed upon request by the board;

- c. The procedure for tracking the prescription during each stage of the filling, dispensing, and delivery process;
- d. The procedure for identifying on the prescription label all pharmacies involved in filling and dispensing the prescription. A unique identifier on the prescription label is not required to identify a pharmacy solely involved in the holding of a prescription for pick-up or further delivery when that pharmacy has not shared in other filling or dispensing functions;
- e. The policy and procedure for providing adequate security to protect the confidentiality and integrity of patient information;
- f. The policy and procedure for ensuring accuracy and accountability in the delivery process;
- g. The procedure and recordkeeping for returning to the initiating pharmacy any prescriptions that are not delivered to the patient; and
- h. The procedure for informing the patient and obtaining consent for using such a dispensing and delivery process.
- 3. Drugs waiting to be picked up at or delivered from the second pharmacy shall be stored in accordance with subsection A of 18VAC110-20-200.
- C. Delivery to a practitioner of the healing arts licensed by the board to practice pharmacy or to sell controlled substances or other authorized person or entity holding a controlled substances registration authorized for this purpose.
  - 1. A prescription may be delivered by a pharmacy to the office of such a practitioner or other authorized person provided there is a written contract or agreement between the two parties describing the procedures for such a delivery system and the responsibilities of each party.
  - 2. Each pharmacy using this delivery system shall maintain a policy and procedure manual that includes the following information:
    - a. Procedure for tracking and assuring security, accountability, integrity, and accuracy of delivery for the dispensed prescription from the time it leaves the pharmacy until it is handed to the patient or agent of the patient;
    - b. Procedure for providing counseling;
    - c. Procedure and recordkeeping for return of any prescription medications not delivered to the patient;

- d. The procedure Procedure for assuring confidentiality of patient information; and
- e. The procedure Procedure for informing the patient and obtaining consent for using such a delivery process.
- 3. Prescriptions waiting to be picked up by a patient at the alternate site shall be stored in a lockable room or lockable cabinet, cart, or other device that cannot be easily moved and that shall be locked at all times when not in use. Access shall be restricted to the licensed practitioner of the healing arts or the responsible party listed on the application for the controlled substances registration, or either person's designee.
- D. The contracts or agreements and the policy and procedure manuals required by this section for alternate delivery shall be maintained both at the originating pharmacy as well as the alternate delivery site.
- E. A controlled substances registration as an alternate delivery site shall only be issued to an entity without a prescriber or pharmacist present at all times the site is open if there is a valid patient health or safety reason not to deliver dispensed prescriptions directly to the patient and if compliance with all requirements for security, policies, and procedures can be reasonably assured.

VA.R. Doc. No. R18-08; Filed January 8, 2020, 8:47 a.m.

#### **BOARD OF PHYSICAL THERAPY**

#### **Proposed Regulation**

<u>Title of Regulation:</u> 18VAC112-20. Regulations Governing the Practice of Physical Therapy (amending 18VAC112-20-10, 18VAC112-20-25, 18VAC112-20-50, 18VAC112-20-65, 18VAC112-20-70, 18VAC112-20-90, 18VAC112-20-100, 18VAC112-20-120, 18VAC112-20-130 through 18VAC112-20-140).

Statutory Authority: §§ 54.1-2400 and 54.1-3474 of the Code of Virginia.

#### **Public Hearing Information:**

February 13, 2020 - 9:35 a.m. - Board Room 4, Department of Health Professions, Perimeter Center, 9960 Mayland Drive, Suite 201, Henrico, VA 23233

Public Comment Deadline: April 3, 2020.

Agency Contact: Corie Tillman Wolf, Executive Director, Board of Physical Therapy, 9960 Mayland Drive, Suite 300, Richmond, VA 23233, telephone (804) 367-4674, FAX (804) 527-4413, or email ptboard@dhp.virginia.gov.

<u>Basis:</u> Regulations Governing the Practice of Physical Therapy are promulgated under the general authority of Chapter 24 of Title 54.1 of the Code of Virginia. Section 54.1-2400 provides the Board of Physical Therapy the authority to promulgate regulations to administer the

regulatory system. Specific authority to promulgate regulations for initial and continuing licensure in physical therapy is found in § 54.1-3474 and all of Chapter 34.1 of Title 54.1 of the Code of Virginia.

<u>Purpose:</u> The practice of physical therapy requires specialized education and training and the maintenance of knowledge and skills in order to be performed safely. Regulation is essential to ensure minimal competency to protect the health and safety of patients receiving physical therapy services. Amendments are primarily intended to update and clarify current board policy.

<u>Substance:</u> The substantive provisions of the proposed regulations are:

- 1. Modification of active practice to allow licensees a longer period of time in which to count hours of practice and to allow the board to grant exemptions or exceptions;
- 2. Amendments to requirements for reactivation or reinstatement to allow an applicant to count practice in Virginia if actively licensed in the past four years;
- 3. Coordination of rules for foreign-trained applicants with requirements of the Federation of State Boards of Physical Therapy for approval to sit for the licensing examination;
- 4. Recognition of physical therapy licensure in Canada as qualification for endorsement; and
- 5. Expansion of the list of entities that may offer or accredit continuing education and the opportunities to obtain Type 2 continuing education hours.

<u>Issues:</u> There are no specific advantages to the public, but facilitation of licensure or return to practice may have a modest increase in the number of licensees available to provide physical therapy services. There are no disadvantages to the public.

There are no advantages or disadvantages to the agency. This action is the result of a periodic review so providing clarity and updating its regulation is an important goal of the board.

# <u>Department of Planning and Budget's Economic Impact Analysis:</u>

Summary of the Proposed Amendments to Regulation. The Board of Physical Therapy (Board) proposes numerous amendments to the Regulations Governing the Practice of Physical Therapy (regulation) that: 1) provide greater time flexibility for physical therapist and physical therapist assistant licensees and trainees, 2) allow granting an exemption to the active practice requirement for circumstances beyond the control of the licensee, 3) modify the reactivation and reinstatement requirement to include active practice in Virginia towards the amount of time necessary to substantiate 320 hours of active practice, 4) permit renewal notices to be sent by email rather than by letter, 5) increase the number of traineeships that an

unlicensed graduate may have within the one year period following the receipt of the first examination results, 6) insert language concerning continuing learning activities (CLA) that is currently in guidance documents into the regulation, 7) add to the list of qualifying organizations that can provide or approve CLA, and 8) improve clarity.

Background. The Board proposes to add the National Strength and Conditioning Association (NSCA) to the list of organizations that can provide or approve CLA. This stems from a 2018 petition for rulemaking.<sup>2</sup> Otherwise, the current action is the result of a periodic review. The findings of the periodic review were published on February 20, 2019.<sup>3</sup>

Estimated Benefits and Costs.

Active practice: One of the license renewal requirements in the current regulation is the completion of "a minimum of 160 hours of active practice in the preceding two years." Active practice is defined as professional practice as a physical therapist or physical therapist assistant and may include supervisory, administrative, educational or consultative activities or responsibilities for the delivery of such services. The Board proposes to keep the minimum average number of hours per year at 80, but proposes to allow licensees greater flexibility as to when those hours occur. Specifically, the Board proposes to change the required number of hours of active practice for license renewal from 160 hours over two years to 320 hours over four years. The Board also proposes to permit at its discretion extending the deadline for completing active practice requirements for up to one year for good cause shown upon a written request from the licensee prior to the renewal date. These two proposals are clearly beneficial for licensees. To the extent that the greater flexibility in the timing of when the active practice is conducted does not negatively affect the licensees' current competency, the proposals do not introduce cost or risk for the public.

Additionally, the Board proposes to permit at its discretion granting of an exemption to the active practice requirement for circumstances beyond the control of the licensee, such as temporary disability, mandatory military service, or officially declared disaster, upon a written request from the licensee prior to the renewal date. Consistent with all of the proposed amendments in this action, this proposal is beneficial for licensees. To the extent that maintaining active practice is important for current competency, this proposal could result in some reduced current competency in some cases.

One of the methods in the current regulation to reactivate or reinstate a license includes demonstrating 320 active practice hours in "another" jurisdiction within the four years immediately preceding application for reactivation or reinstatement. However, a Virginia licensee may have practiced full time for several years, taken inactive status for a couple of years, and then decided to apply to reactivate or reinstate her license. Because the current rule applies only to

active practice hours in another jurisdiction, it would not allow her to count her time in practice in Virginia during that four-year period. To address this situation, the Board proposes to allow someone who had active practice in Virginia, not just those with active practice outside of the Commonwealth, within the past four years to count those hours for reactivation or reinstatement. This proposal is beneficial for physical therapists and physical therapist assistants, and should not introduce any cost or risk for the public.

Traineeships: The regulation specifies that upon approval of the president of the Board or his designee, an unlicensed graduate who is registered with the Federation of State Boards of Physical Therapy to sit for the national examination may be employed as a trainee under the direct supervision of a licensed physical therapist until the results of the national examination are received. The current regulation states that the traineeship shall terminate two working days after receipt by the candidate of the licensure examination results. The Board proposes to lengthen the timeframe for expiration of the traineeship from two working days to five working days after receipt of the licensure examination results. The Board also proposes to permit traineeships to be extended when officially declared disasters occur. The current regulation does not address the number of traineeships that an unlicensed graduate may have, but a Board guidance document species that there may be up to "two" within the one year period following the receipt of the first examination results. The Board proposes to specify in the regulation that an unlicensed graduate may have up to "three" traineeships within the one year period following the receipt of the first examination results. These three proposals all are beneficial for the trainee in that he would have additional time for experience and would not likely produce any cost or risk for the public.

Continuing learning activities: In order to renew an active license biennially, physical therapists and physical therapist assistants must complete at least 30 contact hours of CLA within the two years immediately preceding renewal. A minimum of 20 of the contact hours required for physical therapists, and 15 of the contact hours required for physical therapist assistants, must be in Type 1 courses. A Type 1 course is an organized program of study, classroom experience or similar educational experience that is directly related to the clinical practice of physical therapy and approved or provided by one of the following organizations or any of its components:

- a. The Virginia Physical Therapy Association;
- b. The American Physical Therapy Association;
- c. Local, state, or federal government agencies;
- d. Regionally accredited colleges and universities;

- e. Health care organizations accredited by a national accrediting organization granted authority by the Centers for Medicare and Medicaid Services to assure compliance with Medicare conditions of participation;
- f. The American Medical Association Category I Continuing Medical Education course;
- g. The National Athletic Trainers' Association; or
- h. The Federation of State Boards of Physical Therapy.

The Board proposes to add the following to the above list: 1) NSCA and 2) providers approved by other state licensing boards for physical therapy. This would increase choice of CLA providers for licensees and may result in reduced costs (either through lower fees or reduced travel or both) and the opportunity to have CLA that is more applicable to some physical therapists and physical therapist assistants count toward the required the number of contact hours. If some licensees do take advantage of the newly approved sources of CLA instead of existing approved CLA providers, some existing providers of CLA would encounter reduced demand for their services, potentially resulting in reduced revenue.

In addition, the board proposes to add certain information to the regulation that is presently in guidance documents. Specifically, information on: 1) what qualifies as Type 2 continuing education, 2) the ratio of college course credit hours to Type 1 CLA contact hours, and 3) the ratio of hours of clinical supervision or instruction to contact hours of Type 2 activity would be added. This would be beneficial in that it may reduce confusion for affected entities and other interested parties.

Other: The current regulation requires that notices be "mailed" to licensees. The Board proposes to amend "mailed" to "sent." This would permit the Board to email renewal notices, rather than use the U.S. Postal Service. This would produce savings in postage and staff time.

Businesses and Other Entities Affected. The proposed amendments affect the 8,240 licensed physical therapists, 3,525 licensed physical therapist assistants, and physical therapy trainees in the Commonwealth, and their employers.<sup>4</sup> Providers of CLA to physical therapists and physical therapist assistants are also affected. The proposed amendments do not appear to introduce costs for the affected entities, but some existing CLA providers may encounter reduced revenue.

Localities<sup>5</sup> Affected.<sup>6</sup> The proposed amendments apply statewide, and do not disproportionately affect any particular locality. The proposed amendments do not appear to introduce costs for local governments.

Projected Impact on Employment. The proposed amendments do not appear to affect total employment.

Effects on the Use and Value of Private Property. The proposal to add new approved providers of CLA potentially

reduces costs for licensees. This may indirectly reduce costs for firms that employ physical therapists and physical therapist assistants if the firms subsidize their employees' CLA costs or take those costs into consideration when determining pay. Certain proposals may increase the pool of licensed physical therapists and licensed physical therapist assistants available to work for firms that provide physical therapy services at any given time. Specifically, proposals: to provide greater time flexibility for physical therapist and physical therapist assistant licensees, to allow granting an exemption to the active practice requirement for circumstances beyond the control of the licensee, and to modify the reactivation and reinstatement requirement to include active practice in Virginia towards the amount of time necessary to substantiate 320 hours of active practice may do so. A larger pool to choose from may reduce some of these firms' hiring costs. The potential reduced expenditures on CLA and hiring may increase the value of some firms that provide physical therapy services

The proposal to add new approved providers of CLA would increase the competition in the provision of CLA that is applicable to physical therapists and physical therapist assistants. To the extent that some licensees take advantage of the newly approved sources of CLA instead of existing approved CLA providers, some existing providers of CLA would likely encounter reduced revenue. This could negatively affect the net value of some such firms.

#### Adverse Effect on Small Businesses:7

Types and Estimated Number of Small Businesses Affected. The proposed amendments affect small providers of physical therapy services and small providers of CLA to physical therapists and physical therapist assistants. Data are not available on the number of firms. The 8,240 licensed physical therapists and 3,525 licensed physical therapist assistants in the Commonwealth are affected.

Costs and Other Effects. The proposed amendments do not appear to increase costs. Some small providers of CLA may encounter reduced demand for their services, and consequently reduced revenue.

Alternative Method that Minimizes Adverse Impact. The proposal to add new approved providers of CLA creates benefit for licensed physical therapists and physical therapist assistants. The benefit cannot be achieved without the resulting potential loss of business for some small existing CLA providers.

number of licensed individuals is available, but the number of employers is not.

<sup>5</sup>"Locality" can refer to either local governments or the locations in the Commonwealth where the activities relevant to the regulatory change are most likely to occur.

 $^6\S~2.2\text{--}4007.04$  defines "particularly affected" as bearing disproportionate material impact.

<sup>7</sup>Pursuant to § 2.2-4007.04 of the Code of Virginia, small business is defined as "a business entity, including its affiliates, that (i) is independently owned and operated and (ii) employs fewer than 500 full-time employees or has gross annual sales of less than \$6 million."

Agency's Response to Economic Impact Analysis: The Board of Physical Therapy concurs with the analysis of the Department of Planning and Budget, except the agency does not agree that this periodic review proposal needs to be sent to the Joint Commission on Administrative Rules. The analysis concludes that all changes are either less restrictive, beneficial to licensees, or clarifying in nature.

#### Summary:

The proposed amendments (i) ensure more clarity in the supervision of trainees, (ii) facilitate renewal by modifying the active practice requirement, (iii) facilitate return to practice for some physical therapists with inactive or lapsed licenses, (iv) coordinate rules for foreign-trained applicants with requirements of Federation of State Boards of Physical Therapy for approval to sit for the licensing examination, (v) recognize physical therapy licensure in Canada as qualification for endorsement, and (vi) expand the approval of entities that may offer or accredit continuing education.

#### Part I General Provisions

#### 18VAC112-20-10. Definitions.

In addition to the words and terms defined in § 54.1-3473 of the Code of Virginia, the following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Active practice" means a minimum of 160 320 hours of professional practice as a physical therapist or physical therapist assistant within the 24 month 48-month period immediately preceding renewal. Active practice may include supervisory, administrative, educational, or consultative activities or responsibilities for the delivery of such services.

"Approved program" means an educational program accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association CAPTE.

"Assessment tool" means oPTion or any other self directed assessment tool approved by FSBPT.

<sup>&</sup>lt;sup>2</sup>See https://townhall.virginia.gov/l/viewpetition.cfm?petitionid=284

<sup>&</sup>lt;sup>3</sup>See https://townhall.virginia.gov/l/GetFile.cfm?File=C:\TownHall\docroot\Review\1752\PReview\_DHP\_1752\_v1.pdf

<sup>&</sup>lt;sup>4</sup>The Department of Health Professions licenses individual physical therapists and physical therapist assistants, but not their employers. Consequently, the

"CAPTE" means the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association.

#### "CLEP" means the College Level Examination Program.

"Contact hour" means 60 minutes of time spent in continuing learning activity exclusive of breaks, meals, or vendor exhibits.

"Direct supervision" means a physical therapist or a physical therapist assistant is physically present and immediately available and is fully responsible for the physical therapy tasks or activities being performed.

"Discharge" means the discontinuation of interventions in an episode of care that have been provided in an unbroken sequence in a single practice setting and related to the physical therapy interventions for a given condition or problem.

"Encounter" means an interaction between a patient and a physical therapist or physical therapist assistant for the purpose of providing health care services or assessing the health and therapeutic status of a patient.

"Evaluation" means a process in which the physical therapist makes clinical judgments based on data gathered during an examination or screening in order to plan and implement a treatment intervention, provide preventive care, reduce risks of injury and impairment, or provide for consultation.

"FCCPT" means the Foreign Credentialing Commission on Physical Therapy.

"FSBPT" means the Federation of State Boards of Physical Therapy.

"General supervision" means a physical therapist shall be available for consultation.

"National examination" means the examinations developed and administered by the Federation of State Boards of Physical Therapy and approved by the board for licensure as a physical therapist or physical therapist assistant.

"Reevaluation" means a process in which the physical therapist makes clinical judgments based on data gathered during an examination or screening in order to determine a patient's response to the treatment plan and care provided.

"Support personnel" means a person who is performing designated routine tasks related to physical therapy under the direction and supervision of a physical therapist or physical therapist assistant within the scope of this chapter.

"TOEFL" means the Test of English as a Foreign Language.

"Trainee" means a person seeking licensure as a physical therapist or physical therapist assistant who is undergoing a traineeship. "Traineeship" means a period of active clinical practice during which an applicant for licensure as a physical therapist or physical therapist assistant works under the direct supervision of a physical therapist approved by the board.

"TSE" means the Test of Spoken English.

"Type 1" means continuing learning activities offered by an approved organization as specified in 18VAC112-20-131.

"Type 2" means continuing learning activities which that may or may not be offered by an approved organization but shall be activities considered by the learner to be beneficial to practice or to continuing learning.

#### 18VAC112-20-25. Current name and address.

Each licensee shall furnish the board his current name and address of record. All notices required by law or by this chapter to be given by the board to any licensee shall be validly given when mailed sent to the latest address of record provided or when served to the licensee. Any change of name or change in the address of record or the public address, if different from the address of record, shall be furnished to the board within 30 days of such change.

# 18VAC112-20-50. Education requirements: graduates of schools not approved by an accrediting agency approved by the board.

A. An applicant for initial licensure as a physical therapist who is a graduate of a school not approved by an accrediting agency approved by the board shall submit the required application and fee and provide documentation of the physical therapist's certification by a report from the FCCPT or of the physical therapist eligibility for licensure as verified by a report from any other credentialing agency approved by the board that substantiates that the physical therapist has been evaluated in accordance with requirements of subsection B of this section.

- B. The board shall only approve a credentialing agency that:
  - 1. Utilizes the FSBPT Coursework Evaluation Tool for Foreign Educated Physical Therapists, based on the year of graduation as required to sit for FSBPT examination, and utilizes original source documents to establish substantial equivalency to an approved physical therapy program;
  - 2. Conducts a review of any license or registration held by the physical therapist in any country or jurisdiction to ensure that the license or registration is current and unrestricted or was unrestricted at the time it expired or was lapsed; and
  - 3. Verifies English language proficiency by passage of the TOEFL and TSE examination or the TOEFL iBT, the Internet-based tests of listening, reading, speaking, and writing or by review of evidence that the applicant's physical therapy program was taught in English or that the native tongue of the applicant's nationality is English.

- C. An applicant for licensure as a physical therapist assistant who is a graduate of a school not approved by the board shall submit with the required application and fee the following:
  - 1. Proof of proficiency in the English language by passing TOEFL and TSE or the TOEFL iBT, the Internet-based tests of listening, reading, speaking, and writing by a score determined by the board or an equivalent examination approved by the board. TOEFL iBT or TOEFL and TSE may be waived upon evidence that the applicant's physical therapist assistant program was taught in English or that the native tongue of the applicant's nationality is English.
  - 2. A copy of the original certificate or diploma that has been certified as a true copy of the original by a notary public, verifying his the applicant's graduation from a physical therapy curriculum. If the certificate or diploma is not in the English language, submit either:
    - a. An English translation of such certificate or diploma by a qualified translator other than the applicant; or
    - b. An official certification in English from the school attesting to the applicant's attendance and graduation date.
  - 3. Verification of the equivalency of the applicant's education to the educational requirements of an approved program for physical therapist assistants from a scholastic credentials service approved by the board and based upon the FSBPT coursework tool for physical therapist assistants.
- D. An applicant for initial licensure as a physical therapist or a physical therapist assistant who is not a graduate of an approved program shall also submit verification of having successfully completed a 1,000-hour traineeship within a two-year period under the direct supervision of a licensed physical therapist. The board may grant an extension beyond two years for circumstances beyond the control of the applicant, such as temporary disability, officially declared disasters, or mandatory military service.
  - 1. The traineeship shall be in accordance with requirements in 18VAC112-20-140.
  - 2. The traineeship requirements of this part may be waived if the applicant for a license can verify, in writing, the successful completion of one year of clinical physical therapy practice as a licensed physical therapist or physical therapist assistant in the United States, its territories, the District of Columbia, or Canada, equivalent to the requirements of this chapter.

# 18VAC112-20-65. Requirements for licensure by endorsement.

A. A physical therapist or physical therapist assistant who holds a current, unrestricted license in the United States, its

territories, the District of Columbia, or Canada may be licensed in Virginia by endorsement.

- B. An applicant for licensure by endorsement shall submit:
- 1. Documentation of having met the educational requirements prescribed in 18VAC112-20-40 or 18VAC112-20-50. In lieu of meeting such requirements, an applicant may provide evidence of clinical practice consisting of at least 2,500 hours of patient care during the five years immediately preceding application for licensure in Virginia with a current, unrestricted license issued by another U.S. jurisdiction or Canadian province;
- 2. The required application, fees, and credentials to the board;
- 3. A current report from the Healthcare Integrity and Protection Data Bank (HIPDB) National Practitioner Data Bank (NPDB);
- 4. Evidence of completion of 15 hours of continuing education for each year in which the applicant held a license in another U.S. jurisdiction or Canada, or 60 hours obtained within the past four years;
- 5. Documentation of passage of an examination equivalent to the Virginia examination at the time of initial licensure or documentation of passage of an examination required by another state or Canadian province at the time of initial licensure in that state or province; and
- 6. Documentation of active practice in physical therapy in another U.S. jurisdiction or Canada for at least 320 hours within the four years immediately preceding his application for licensure. A physical therapist who does not meet the active practice requirement shall:
  - a. Successfully successfully complete 320 hours in a traineeship in accordance with requirements in 18VAC112-20-140; or
  - b. Document that he attained at least Level 2 on the FSBPT assessment tool within the two years preceding application for licensure in Virginia and successfully complete 160 hours in a traineeship in accordance with the requirements in 18VAC112 20 140.
- C. A physical therapist assistant seeking licensure by endorsement who has not actively practiced physical therapy for at least 320 hours within the four years immediately preceding his application for licensure shall successfully complete 320 hours in a traineeship in accordance with the requirements in 18VAC112-20-140.

# 18VAC112-20-70. Traineeship for unlicensed graduate scheduled to sit for the national examination.

A. Upon approval of the president of the board or his designee, an unlicensed graduate who is registered with the Federation of State Boards of Physical Therapy to sit for the

national examination may be employed as a trainee under the direct supervision of a licensed physical therapist until the results of the national examination are received.

- B. The traineeship, which shall be in accordance with requirements in 18VAC112-20-140, shall terminate two five working days following receipt by the candidate of the licensure examination results.
- C. The unlicensed graduate may reapply for a new traineeship while awaiting to take the next examination, provided he has registered to retake the examination. A new traineeship shall not be approved for if more than one year has passed following the receipt of the first examination results. An unlicensed graduate who has passed the examination may be granted a new traineeship for the period between passage of the examination and granting of a license. An unlicensed graduate shall not be granted more than three traineeships within the one year following the receipt of the first examination results.

#### 18VAC112-20-90. General responsibilities.

- A. The physical therapist shall be responsible for managing all aspects of the physical therapy care of each patient and shall provide:
  - 1. The initial evaluation for each patient and its documentation in the patient record;
  - 2. Periodic reevaluation, including documentation of the patient's response to therapeutic intervention; and
  - 3. The documented status of the patient at the time of discharge, including the response to therapeutic intervention. If a patient is discharged from a health care facility without the opportunity for the physical therapist to reevaluate the patient, the final note in the patient record may document patient status.
- B. The physical therapist shall communicate the overall plan of care to the patient or his legally authorized representative and shall also communicate with a referring doctor of medicine, osteopathy, chiropractic, podiatry, or dental surgery; nurse practitioner; or physician assistant to the extent required by § 54.1-3482 of the Code of Virginia.
- C. A physical therapist assistant may assist the physical therapist in performing selected components of physical therapy intervention to include treatment, measurement, and data collection, but not to include the performance of an evaluation as defined in 18VAC112-20-10.
- D. A physical therapist assistant's visits to encounters with a patient may be made under general supervision.
- E. A physical therapist providing services with a direct access certification as specified in § 54.1-3482 of the Code of Virginia shall utilize the Direct Access Patient Attestation and Medical Release Form prescribed by the board or otherwise include in the patient record the information, attestation and

written consent required by subsection B of § 54.1-3482 of the Code of Virginia.

#### 18VAC112-20-100. Supervisory responsibilities.

- A. A physical therapist shall be fully responsible for any action of persons performing physical therapy functions under the physical therapist's supervision or direction.
- B. Support personnel shall only perform routine assigned physical therapy tasks under the direct supervision of a licensed physical therapist or a licensed physical therapist assistant, who shall only assign those tasks or activities that are nondiscretionary and do not require the exercise of professional judgment.
- C. A physical therapist shall provide direct supervision to no more than three individual trainees <u>or students</u> at any one time
- D. A physical therapist shall provide direct supervision to a student in an approved program who is satisfying clinical educational requirements in physical therapy. A physical therapist or a physical therapist assistant shall provide direct supervision to a student in an approved program for physical therapist assistants.
- E. A physical therapist shall provide direct supervision to a student who is satisfying clinical educational requirements in physical therapy in a nonapproved physical therapist program that has been granted the Candidate for Accreditation status from CAPTE. Either a physical therapist or physical therapist assistant shall provide direct supervision to a student who is satisfying clinical education requirements in a nonapproved physical therapist assistant program that has been granted the Candidate for Accreditation status from CAPTE.

#### 18VAC112-20-120. Responsibilities to patients.

- A. The initial patient <u>visit encounter</u> shall be made by the physical therapist for evaluation of the patient and establishment of a plan of care.
- B. The physical therapist assistant's first visit encounter with the patient shall only be made after verbal or written communication with the physical therapist regarding patient status and plan of care. Documentation of such communication shall be made in the patient's record.
- C. Documentation of physical therapy interventions shall be recorded on a patient's record by the physical therapist or physical therapist assistant providing the care.
- D. The physical therapist shall reevaluate the patient as needed, but not less than according to the following schedules:
  - 1. For inpatients in hospitals as defined in § 32.1-123 of the Code of Virginia, it shall be not less than once every seven consecutive days.

- 2. For patients in other settings, it shall be not less than one of 12 visits encounters made to the patient during a 30-day period, or once every 30 days from the last reevaluation, whichever occurs first.
- 3. For patients who have been receiving physical therapy care for the same condition or injury for six months or longer, it shall be at least every 90 days from the last reevaluation.

Failure to abide by this subsection due to the absence of the physical therapist in case of illness, vacation, or professional meeting, for a period not to exceed five consecutive days, will not constitute a violation of these provisions.

E. The physical therapist shall be responsible for ongoing involvement in the care of the patient to include regular communication with a physical therapist assistant regarding the patient's plan of treatment.

#### 18VAC112-20-130. Biennial renewal of license.

- A. A physical therapist and or physical therapist assistant who intends to continue practice shall renew his license biennially by December 31 in each even-numbered year and pay to the board the renewal fee prescribed in 18VAC112-20-27.
- B. A licensee whose licensure has not been renewed by the first day of the month following the month in which renewal is required shall pay a late fee as prescribed in 18VAC112-20-27.
- C. In order to renew an active license, a licensee shall be required to:
  - 1. Complete a minimum of 160 320 hours of active practice in the preceding two four years; and
  - 2. Comply with continuing competency requirements set forth in 18VAC112-20-131.
- D. The board may grant an extension of the deadline for completing active practice requirements for up to one year for good cause shown upon a written request from the licensee prior to the renewal date.
- E. The board may grant an exemption to the active practice requirement for circumstances beyond the control of the licensee, such as temporary disability, mandatory military service, or officially declared disaster, upon a written request from the licensee prior to the renewal date.

# 18VAC112-20-131. Continued competency requirements for renewal of an active license.

A. In order to renew an active license biennially, a physical therapist or a physical therapist assistant shall complete at least 30 contact hours of continuing learning activities within the two years immediately preceding renewal. In choosing continuing learning activities or courses, the licensee shall consider the following: (i) the need to promote ethical

- practice, (ii) an appropriate standard of care, (iii) patient safety, (iv) application of new medical technology, (v) appropriate communication with patients, and (vi) knowledge of the changing health care system.
- B. To document the required hours, the licensee shall maintain the Continued Competency Activity and Assessment Form that is provided by the board and that shall indicate completion of the following:
  - 1. A minimum of 20 of the contact hours required for physical therapists and 15 of the contact hours required for physical therapist assistants shall be in Type 1 courses. For the purpose of this section, "course" means an organized program of study, classroom experience, or similar educational experience that is directly related to the clinical practice of physical therapy and approved or provided by one of the following organizations or any of its components:
    - a. The Virginia Physical Therapy Association;
    - b. The American Physical Therapy Association;
    - c. Local, state, or federal government agencies;
    - d. Regionally accredited colleges and universities;
    - e. Health care organizations accredited by a national accrediting organization granted authority by the Centers for Medicare and Medicaid Services to assure compliance with Medicare conditions of participation;
    - f. The American Medical Association Category I Continuing Medical Education course;
    - g. The National Athletic Trainers' Association; or
    - h. The Federation of State Boards of Physical Therapy;
    - i. The National Strength and Conditioning Association; or
    - j. Providers approved by other state licensing boards for physical therapy.

One credit hour of a college course shall be considered the equivalent of 15 contact hours of Type 1 continuing education.

2. No more than 10 of the contact hours required for physical therapists and 15 of the contact hours required for physical therapist assistants may be Type 2 activities or courses, which may or may not be offered by an approved organization but which shall be related to the clinical practice of physical therapy. For the purposes of this subdivision, Type 2 activities may include:

eonsultation a. Consultation with colleagues, independent study, and research or writing on subjects related to practice.

Up to two of the Type 2 continuing education hours may be satisfied through delivery b. Delivery of physical therapy services, without compensation, to low-income individuals receiving services through a local health department or a free clinic organized in whole or primarily for the delivery of health services for up to two of the Type 2 hours.

Up to two of the Type 2 continuing education hours may be satisfied by attendance c. Attendance at a meeting of the board or disciplinary proceeding conducted by the board for up to two of the Type 2 hours.

- d. Classroom instruction of workshops or courses.
- e. Clinical supervision of students and research and preparation for the clinical supervision experience.

Forty hours of clinical supervision or instruction shall be considered the equivalent of one contact hour of Type 2 activity.

- 3. Documentation of specialty certification by the American Physical Therapy Association may be provided as evidence of completion of continuing competency requirements for the biennium in which initial certification or recertification occurs.
- 4. Documentation of graduation from a transitional doctor of physical therapy program may be provided as evidence of completion of continuing competency requirements for the biennium in which the physical therapist was awarded the degree.
- 5. A physical therapist who can document that he attained at least Level 2 on the FSBPT assessment tool may receive five hours of Type 1 credit for the biennium in which the assessment tool was taken. A physical therapist who can document that he attained at least Level 3 or 4 on the FSBPT assessment tool may receive 10 hours of Type 1 credit for the biennium in which the assessment tool was taken. Continuing competency credit shall only be granted for the FSBPT assessment tool once every four years.
- C. A licensee shall be exempt from the continuing competency requirements for the first biennial renewal following the date of initial licensure by examination in Virginia.
- D. The licensee shall retain his records on the completed form with all supporting documentation for a period of four years following the renewal of an active license.
- E. The licensees selected in a random audit conducted by the board shall provide the completed Continued Competency Activity and Assessment Form and all supporting documentation within 30 days of receiving notification of the audit.
- F. Failure to comply with these requirements may subject the licensee to disciplinary action by the board.

- G. The board may grant an extension of the deadline for continuing competency requirements for up to one year for good cause shown upon a written request from the licensee prior to the renewal date.
- H. The board may grant an exemption for all or part of the requirements for circumstances beyond the control of the licensee, such as temporary disability, mandatory military service, or officially declared disasters, upon a written request from the licensee prior to the renewal date.

#### 18VAC112-20-135. Inactive license.

- A. A physical therapist or physical therapist assistant who holds a current, unrestricted license in Virginia shall, upon a request on the renewal application and submission of the required renewal fee, be issued an inactive license.
  - 1. The holder of an inactive license shall not be required to meet active practice requirements.
  - 2. An inactive licensee shall not be entitled to perform any act requiring a license to practice physical therapy in Virginia.
- B. A physical therapist or physical therapist assistant who holds an inactive license may reactivate his license by:
  - 1. Paying the difference between the renewal fee for an inactive license and that of an active license for the biennium in which the license is being reactivated:
  - 2. Providing proof of 320 active practice hours in another any jurisdiction in which the physical therapist or physical therapist assistant was licensed for active practice within the four years immediately preceding application for reactivation.
  - a. If the inactive physical therapist licensee does not meet the requirement for active practice, the license may be reactivated by completing 320 hours in a traineeship that meets the requirements prescribed in 18VAC112-20-140 or documenting that he has attained at least Level 2 on the FSBPT assessment tool within the two years preceding application for reactivation of licensure in Virginia and successfully completing 160 hours in a traineeship in accordance with requirements in 18VAC112 20 140.
    - b. If the inactive physical therapist assistant licensee does not meet the requirement for active practice, the license may be reactivated by completing 320 hours in a traineeship that meets the requirements prescribed in 18VAC112 20 140; and
  - 3. Completing the number of continuing competency hours required for the period in which the license has been inactive, not to exceed four years.

#### 18VAC112-20-136. Reinstatement requirements.

A. A physical therapist or physical therapist assistant whose Virginia license is lapsed for two years or less may reinstate

his license by payment of the renewal and late fees as set forth in 18VAC112-20-27 and completion of continued competency requirements as set forth in 18VAC112-20-131.

- B. A physical therapist or physical therapist assistant whose Virginia license is lapsed for more than two years and who is seeking reinstatement shall:
  - 1. Apply for reinstatement and pay the fee specified in 18VAC112-20-27;
  - 2. Complete the number of continuing competency hours required for the period in which the license has been lapsed, not to exceed four years; and
  - 3. Have actively practiced physical therapy in another any jurisdiction in which the physical therapist or physical therapist assistant was licensed for active practice for at least 320 hours within the four years immediately preceding applying for reinstatement.
    - a. If a physical therapist licensee does not meet the requirement for active practice, the license may be reinstated by completing 320 hours in a traineeship that meets the requirements prescribed in 18VAC112-20-140 or documenting that he has attained at least Level 2 on the FSBPT assessment tool within the two years preceding application for licensure in Virginia and successfully completing 160 hours in a traineeship in accordance with requirements in 18VAC112 20 140.

b. If a physical therapist assistant licensee does not meet the requirement for active practice, the license may be reinstated by completing 320 hours in a traineeship that meets the requirements prescribed in 18VAC112 20 140.

#### 18VAC112-20-140. Traineeship requirements.

- A. The traineeship shall be approved by the board and <u>served</u> under the direction and supervision of a licensed physical therapist.
- B. Supervision and identification of trainees:
- 1. There shall be a limit of two physical therapists assigned to provide supervision for each trainee.
- 2. The supervising physical therapist shall countersign patient documentation (i.e., notes, records, charts) for services provided by a trainee.
- 3. The trainee shall wear identification designating them as a "physical therapist trainee" or a "physical therapist assistant trainee."

#### C. Completion of traineeship.

- 1. The physical therapist supervising the trainee shall submit a report to the board at the end of the required number of hours on forms supplied by the board.
- 2. If the traineeship is not successfully completed at the end of the required hours, as determined by the supervising

physical therapist, the president of the board or his designee shall determine if a new traineeship shall commence. If the president of the board determines that a new traineeship shall not commence, then the application for licensure shall be denied.

3. The second traineeship may be served under a different supervising physical therapist and may be served in a different organization than the initial traineeship. If the second traineeship is not successfully completed, as determined by the supervising physical therapist, then the application for licensure shall be denied.

VA.R. Doc. No. R19-14; Filed January 8, 2020, 9:30 a.m.

#### **BOARD OF COUNSELING**

#### **Final Regulation**

<u>Titles of Regulations:</u> 18VAC115-20. Regulations Governing the Practice of Professional Counseling (amending 18VAC115-20-49).

18VAC115-50. Regulations Governing the Practice of Marriage and Family Therapy (amending 18VAC115-50-50).

18VAC115-60. Regulations Governing the Practice of Licensed Substance Abuse Treatment Practitioners (amending 18VAC115-60-60).

Statutory Authority: § 54.1-2400 of the Code of Virginia.

Effective Date: March 4, 2020.

Agency Contact: Jaime Hoyle, Executive Director, Board of Counseling, 9960 Mayland Drive, Suite 300, Richmond, VA 23233, telephone (804) 367-4406, FAX (804) 527-4435, or email jaime.hoyle@dhp.virginia.gov.

#### Summary:

The amendments provide a pathway for a foreign-trained graduate in counseling to obtain licensure as a professional counselor, a marriage and family therapist, or a substance abuse treatment practitioner in the Commonwealth. The amendments provide that graduates of programs that are not within the United States or Canada can qualify for licensure if the graduates can provide documentation from an acceptable credential evaluation service that allows the board to determine if the program meets the requirements set forth in the regulation.

<u>Summary of Public Comments and Agency's Response:</u> No public comments were received by the promulgating agency.

#### 18VAC115-20-49. Degree program requirements.

A. The applicant shall have completed a graduate degree from a program that prepares individuals to practice counseling, as defined in § 54.1-3500 of the Code of Virginia, which is offered by a college or university accredited by a

regional accrediting agency, and which meets the following criteria:

- 1. There must be a sequence of academic study with the expressed intent to prepare counselors as documented by the institution;
- 2. There must be an identifiable counselor training faculty and an identifiable body of students who complete that sequence of academic study; and
- 3. The academic unit must have clear authority and primary responsibility for the core and specialty areas.
- B. Programs that are approved by CACREP or CORE are recognized as meeting the requirements of subsection A of this section.
- C. Graduates of programs that are not within the United States or Canada shall provide documentation from an acceptable credential evaluation service that provides information that allows the board to determine if the program meets the requirements set forth in this chapter.

#### 18VAC115-50-50. Degree program requirements.

- A. The applicant shall have completed a graduate degree from a program that prepares individuals to practice marriage and family therapy as defined in § 54.1-3500 of the Code of Virginia from a college or university which that is accredited by a regional accrediting agency and which that meets the following criteria:
  - 1. There must be a sequence of academic study with the expressed intent to prepare students to practice marriage and family therapy as documented by the institution;
  - 2. There must be an identifiable marriage and family therapy training faculty and an identifiable body of students who complete that sequence of academic study; and
  - 3. The academic unit must have clear authority and primary responsibility for the core and specialty areas.
- B. Programs that are approved by CACREP as programs in marriage and family counseling/therapy counseling or therapy or by COAMFTE are recognized as meeting the requirements of subsection A of this section.
- C. Graduates of programs that are not within the United States or Canada shall provide documentation from an acceptable credential evaluation service that provides information that allows the board to determine if the program meets the requirements set forth in this chapter.

#### 18VAC115-60-60. Degree program requirements.

A. The applicant shall have completed a graduate degree from a program that prepares individuals to practice substance abuse treatment or a related counseling discipline as defined in § 54.1-3500 of the Code of Virginia from a

college or university accredited by a regional accrediting agency that meets the following criteria:

- 1. There must be a sequence of academic study with the expressed intent to prepare counselors as documented by the institution;
- 2. There must be an identifiable counselor training faculty and an identifiable body of students who complete that sequence of academic study; and
- 3. The academic unit must have clear authority and primary responsibility for the core and specialty areas.
- B. Programs that are approved by CACREP as programs in addictions counseling are recognized as meeting the requirements of subsection A of this section.
- C. Graduates of programs that are not within the United States or Canada shall provide documentation from an acceptable credential evaluation service that provides information that allows the board to determine if the program meets the requirements set forth in this chapter.

VA.R. Doc. No. R19-5643; Filed January 7, 2020, 7:12 p.m.



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# TITLE 20. PUBLIC UTILITIES AND TELECOMMUNICATIONS

#### STATE CORPORATION COMMISSION

#### **Proposed Regulation**

REGISTRAR'S NOTICE: The State Corporation Commission is claiming an exemption from the Administrative Process Act in accordance with § 2.2-4002 A 2 of the Code of Virginia, which exempts courts, any agency of the Supreme Court, and any agency that by the Constitution is expressly granted any of the powers of a court of record.

<u>Titles of Regulations:</u> **20VAC5-200. Public Utility Accounting (repealing 20VAC5-200-10).** 

20VAC5-300. Energy Regulation; In General (repealing 20VAC5-300-10, 20VAC5-300-30, 20VAC5-300-50, 20VAC5-300-60, 20VAC5-300-80, 20VAC5-300-100).

20VAC5-306. Standards for Integrated Resource Planning and Investments in Conservation and Demand Management for Natural Gas (repealing 20VAC5-306-10 through 20VAC5-306-40).

20VAC5-311. Interim Rules Governing Electric and Natural Gas Retail Access Pilot Programs (repealing 20VAC5-311-10 through 20VAC5-311-60).

20VAC5-317. Rates for Standby Service Furnished to Certain Renewable Cogeneration Facilities Pursuant to

§ 56-235.1:1 of the Code of Virginia (repealing 20VAC5-317-40).

20VAC5-320. Regulations Governing Transfer of Transmission Assets to Regional Transmission Entities (repealing 20VAC5-320-120).

Statutory Authority: § 12.1-13 of the Code of Virginia.

<u>Public Hearing Information:</u> A public hearing will be held upon request.

Public Comment Deadline: February 21, 2020.

Agency Contact: Andrea Macgill, Associate General Counsel, State Corporation Commission, P.O. Box 1197, Richmond, VA 23218, telephone (804) 371-9064, FAX (804) 371-9240, or email andrea.macgill@scc.virginia.gov.

#### Summary:

The proposed amendments repeal certain obsolete regulations and schedules that (i) have been replaced by regulations in another chapter, (ii) are duplicative of State Corporation Commission orders or partial orders, or (iii) require certain utilities to submit filings with the commission on or before dates in the past.

AT RICHMOND, JANUARY 9, 2020

COMMONWEALTH OF VIRGINIA, ex rel.

STATE CORPORATION COMMISSION

CASE NO. PUR-2019-00219

Ex Parte: In the matter of repealing regulations

#### ORDER INITIATING RULEMAKING PROCEEDING

The State Corporation Commission ("Commission") at various times has adopted numerous regulations pursuant to § 12.1-13 of the Code of Virginia ("Code"), as well as various statutes in Title 56 of the Code. These regulations are codified in Title 20 of the Virginia Administrative Code ("VAC").

The regulations contain certain obsolete rules and schedules that are no longer required. The following VAC chapter contains Interim Rules Governing Electric and Natural Gas Retail Access Pilot Programs: 20 VAC 5-311-10 et seq. This chapter in its entirety is no longer required, given the codification of the Rules Governing Retail Access to Competitive Energy Services in 20 VAC 5-312-10 et seq. In addition, the following regulations require certain utilities to submit filings with the Commission on or before dates in the past and are, therefore, no longer required: 20 VAC 5-317-40; and 20 VAC 5-320-120.

The following regulations are duplicative of Commission orders or partial orders, and it is not necessary for such orders to be included in the Virginia Administrative Code: 20 VAC 5-200-10; 20 VAC 5-300-10; 20 VAC 5-300-30; 20 VAC 5-300-50; 20 VAC 5-300-60; 20 VAC 5-300-80; 20

VAC 5-300-100; and 20 VAC 5-306-10 et seq. (entire chapter).

NOW THE COMMISSION, upon consideration of this matter, is of the opinion and finds that a proceeding should be initiated to repeal the regulations set forth above. To initiate this proceeding, the Commission Staff has prepared proposed revisions to the regulations in Title 20 of the VAC to remove obsolete rules and schedules that are no longer needed ("Proposed Repealed Regulations"). The Proposed Repealed Regulations are appended to this Order as Appendix A. We will direct that notice of the Proposed Repealed Regulations be given to the public and that interested persons be provided an opportunity to file written comments on the Proposed Repealed Regulations, propose modifications or supplements to the Proposed Repealed Regulations, and/or request a hearing on the Proposed Repealed Regulations. Individuals should be specific in their comments, proposals, or supplements to the Proposed Repealed Regulations and address only those issues discussed in this Order. Issues outside the scope of the revisions to the regulations discussed in this Order will not be open for consideration.

### Accordingly, IT IS ORDERED THAT:

- (1) This case is docketed and assigned Case No. PUR-2019-00219.
- (2) The Commission's Division of Information Resources shall forward a copy of this Order Initiating Rulemaking Proceeding to the Registrar of Regulations for publication in the Virginia Register of Regulations.
- (3) The Commission's Division of Information Resources shall make a downloadable version of the Proposed Repealed Regulations, Appendix A, available for access by the public at the Commission's website, http://www.scc.virginia.gov/case. The Clerk of the Commission shall make a copy of the Proposed Repealed Regulations available for public inspection and provide a copy, free of charge, in response to any written request for one.
- (4) On or before February 21, 2020, any interested person may comment on, propose modifications or supplements to, or request a hearing on the Proposed Repealed Regulations by filing an original and fifteen (15) copies of such comments or requests with Joel H. Peck, Clerk, State Corporation Commission, c/o Document Control Center, P.O. Box 2118, Richmond, Virginia 23218. Interested persons desiring to submit comments or hearing requests electronically may do so on or before February 21, 2020, by following the instructions available at the Commission's website: http://www.scc.virginia.gov/case. Individuals shall be specific in their comments to the Proposed Repealed Regulations and shall address only those issues discussed in this Order. Issues outside the scope of the revisions to the regulations discussed in this Order will not be open for consideration. Any request

for hearing shall state with specificity why the issues raised in the request for hearing cannot be adequately addressed in written comments. Interested parties shall refer in their comments or requests to Case No. PUR-2019-00219.

- (5) If no written request for a hearing on the Proposed Repealed Regulations, as outlined in this Order, is received on or before February 21, 2020, the Commission may, upon consideration of any comments submitted in support of or in opposition to the proposal, enter an order based upon the papers filed herein.
- (6) This matter is continued.

AN ATTESTED COPY hereof shall be sent by the Clerk of the Commission to all persons on Attachment A hereto, and C. Meade Browder, Jr., Senior Assistant Attorney General, Division of Consumer Counsel, Office of the Attorney General, 202 N. 9th Street, 8th Floor, Richmond, Virginia 23219-3424. A copy hereof shall be delivered to the Commission's Office of General Counsel and the Divisions of Public Utility Regulation and Utility Accounting and Finance.

# 20VAC5-200-10. Adoption of revised uniform system of accounts for gas utilities. (Repealed.)

At the National Association of Regulatory and Utilities Commissioners' (NARUC) convention held in Phoenix, Arizona, on November 17-20, 1958, resolutions were adopted recommending to the commissions represented by membership in the Association the adoption of revised Uniform Systems of Accounts for Gas Utilities. This system of accounts was published and adopted by a number of state commissions, including this Commission.

Although there have been numerous changes in accounting principles and practices and although the Federal Power Commission has adopted numerous amendments to the systems of accounts that it prescribes for gas utilities, there have been no amendments to the NARUC system since it was issued in 1958.

Realizing the need to bring the NARUC system up to date, the NARUC Accounting Committee undertook a complete review of the presently recommended system of accounts. The review of the system of accounts has been completed by the Association's Committee on Accounts and Statistics, and the Committee's recommended revisions have resulted in adoption and recommendation of a new, revised system of accounts by the NARUC.

Also, this Commission is aware that the Federal Power Commission, by order No. 490 issued on August 22, 1973, has eliminated Account No. 271 Contributions In Aid of Construction—and prescribed disposition of the balance in such account and the treatment of future contributions in aid of construction. This change was not included in the NARUC recommended revised system of accounts.

NOW, UPON CONSIDERATION, the Commission is of the opinion and finds:

- 1. That the system of accounts for gas utilities prescribed by this Commission should be revised to conform with the recommended revisions of the NARUC except in regard to Account No. 271. The Commission's prescribed treatment of contributions in aid of construction should be substantially the same as that of the Federal Power Commission;
- 2. That, however, the gas utilities under the jurisdiction of the Commission should continue to maintain the amounts of contributions in aid of construction on a memorandum basis for tax and other related purposes where such detail is needed;
- 3. That implementation of the revised system of accounts for gas utilities should become effective January 1, 1974, and the gas utilities should implement a memorandum record of contributions in aid of construction at that time; accordingly

#### IT IS ORDERED:

- 1. That the uniform system of accounts for gas utilities prescribed by the Commission, effective January 1, 1961, be discontinued and cancelled as of January 1, 1974;
- 2. That every gas utility company operating in this Commonwealth shall institute and place into effect a system of accounts in accordance with the rules and regulations set forth in the Uniform System of Accounts for Gas Utilities, Classes A and B, C or D as applicable to it, prepared by the Committee on Accounts and Statistics of the National Association of Regulatory and Utilities Commissioners and filed with this order marked respectively as "Uniform System of Accounts For Class A and B Gas Utilities," "Uniform System of Accounts For Class C Gas Utilities," and Uniform System of Accounts For Class D Gas Utilities," such system of accounts to become effective, except for Account No. 271 Contributions in Aid of Construction;
- 3. That the Acting Chief Accountant to the Commission shall cause to be prepared a written directive setting forth treatment for contributions in aid of construction in substantial compliance with the ordering provisions of Federal Power Commission Order No. 490 and upon approval of such directive by the Commission, the same shall be forwarded to each gas utility and shall replace and supersede all prescribed treatment in the NARUC recommended system of accounts in conflict therewith; and, that the Acting Chief Accountant shall cause to be prepared as an addendum to the written directive, an instruction for the approval of the Commission, prescribing the memorandum record which shall be maintained for contributions in aid of construction for tax and other administrative purposes;

4. That effective January 1, 1974, every gas utility operating in this Commonwealth shall commence to keep its books and records in accordance with the system of accounts and the written directive for contributions in aid of construction filed herein;

5. That an attested copy of this order, together with, or as soon hereafter as available, the revised system of accounts and written directive and addendum of the Acting Chief Accountant, shall be sent to each gas utility operating in this Commonwealth.

# 20VAC5-300-10. Investigation of promotional allowances and practices of public utilities. (Repealed.)

Opinion, BY THE COMMISSION:

This proceeding was instituted by order of the Commission on April 12, 1966. The order instituted an investigation to determine:

(a) What promotional allowances are offered, made or given to anyone or what promotional practices are used or followed with respect to anyone by the public utilities which are parties to this proceeding in connection with the furnishing or the offer to furnish in this State of either electric energy or gas for heat, light or power;

(b) Whether any such promotional allowances or practices are in violation of the laws of this State: and.

(c) What action should be taken by the Commission in the public interest with respect to any such promotional allowances or practices.

This Commission has had jurisdiction over such matters since its creation as the governmental agency regulating public utilities. Also, utility companies have engaged in promotional practices, including the giving of promotional allowances and similar inducements to the use of their service, for many years. The Commission has received no complaints from consumers in connection with such promotional practices, and in fact no formal complaint has ever been filed with respect to such practices except to the extent that the testimony, arguments and briefs of the parties in this proceeding constitute such complaints.

In the 1966 Session of the Virginia General Assembly representatives of the fuel oil dealers were responsible for the introduction of a bill which would have made unlawful promotional allowances and practices of the types engaged in by many utility companies. This legislation was not passed by the General Assembly, but in its place there was enacted a provision directing the Commission to investigate the promotional allowances and practices of public utilities and take such action as such investigation may indicate to be in the public interest.

On February 7, 1966, prior to the introduction of this bill, the Commission directed each electric and gas utility

operating within the State of Virginia to furnish to the Commission a copy of the sales promotional programs which they had in use. This was done by the utilities, and these promotional programs are the subject of this proceeding.

Pursuant to the order of April 12, 1966, a hearing on this matter was held on June 20, 21 and 22, 1966. The electric utilities, the gas utilities and the fuel oil dealers appeared and were represented by counsel. The electric and gas utilities presented a great deal of frequently repetitious evidence in support of their positions. The fuel oil dealers, however, did not offer any evidence, stating that it would only be repetitious of that presented by the gas utilities. Opening briefs were filed by the electric and gas utilities on September 1, 1966, and reply briefs were filed on September 21, 1966.

At the hearing and in their briefs the electric utilities concentrated on justifying their promotional allowances and practices and did not concern themselves with the allowances and practices of their competitors. Conversely, the gas utilities concentrated on challenging the allowances and practices of the electric utilities and made no attempt to justify their own, other than as being necessary to compete with the practices of the electric utilities.

The basic position of the electric utilities may be summarized generally as follows: promotional allowances and underground wiring programs are desirable and in the public interest because they stimulate the growth of use of electricity and this growth is necessary to keep electric rates low; the uses of electricity which are promoted in this fashion are uses which have high revenues in relation to costs and therefore are desirable uses from the utility's point of view; the allowances and underground wiring practices are not discriminatory because the benefits of them are available to all customers who meet the objective requirements which have been established; the size of the allowances and costs of other promotional practices are not large enough to impose a burden on customers in other classes and are recovered in a reasonably short period of time; and it is in the public interest for utility management to be flexible and imaginative in promoting increased sales of electricity. In opposition to this, the contentions of the gas utilities may be likewise generally summarized; promotional allowances and underground wiring programs are unjustly discriminatory in that they confer benefits upon some customers and deny those benefits to others within the same general classification of service; the practices of the electric companies are in violation of their filed tariffs; the revenues generated as a result of the challenged promotions, when all the costs of generating those revenues are taken into account, are insufficient to permit the electric companies to recover those costs in a reasonable time and therefore there is discrimination against other customers; and the public interest requires that all cash allowances and similar inducements be prohibited and that underground electric service be furnished only upon payment of the

additional cost of such service by the person who benefits from it.

At the outset the electric utilities also defended certain promotional programs which guaranteed to electric heating customers that their heating bills would not exceed certain amounts or that they would be satisfied in every respect with such electric heat, and the gas utilities likewise opposed these programs. During the hearing the Commission, in an interim ruling which is hereby reaffirmed1, declared that such programs were unlawful and had to be discontinued, and the electric utilities have not pursued this matter any further.

The principal questions to be determined in this proceeding are whether utility promotional allowances and practices constitute "unjust discrimination" in violation of § 56 247 of the Code of Virginia, and what action is necessary to eliminate or prevent such unjust discrimination.

The evidence in this proceeding, particularly the report of Ernest M. Jordan, Jr., Assistant Engineer of the Commission (Exhibit No. 1), shows a variety of promotional allowances and practices by the utilities. The principal challenge (other than with respect to those guarantees of cost and satisfaction which have already been held to be invalid) has been to the payment of cash incentives for the installation of certain electric appliances and to the furnishing of underground distribution at partial or no cost to customers who make certain uses of electricity.

In general the payment of cash allowances or incentives was not shown to be illegal or contrary to the public interest in this case. The programs under which such payments are made do provide for varying treatment of customers within residential, commercial and industrial classifications. However, these classifications are not exclusive, and reasonable subclassifications may be made. In general, the classifications made by the electric utilities in their promotional programs are those based on the amount and character of the consumption of electricity: Gold Medallion homes, homes with electric heat, homes with electric water heaters, homes with certain other electric appliances. The evidence showed that the uses of electricity promoted tended to improve the utilization of the installed plant of the utilities and thereby improve the annual load factor of those utilities. Moreover, it was shown that the additional revenues generated by the uses of electricity promoted was sufficient to enable the utilities to recover those costs within a reasonable period of time generally speaking, less than a year on the basis of gross revenues and less than two years if gross revenues are reduced by application of the system operating ratio. We believe this effectively prevents any discrimination against other customers and actually operates to the benefit of all the customers. The weight of decided authority from other States is to the same effect. See, for example, Gifford v. Central Maine Power Co., 217 A. 2d 200 (1966); Rossi v. Garton, 60 PUR 3d 210 (1965); Re Delaware Power & Light

Co., 56 PUR 3d 1(1964); Re Savannah Electric and Power Company, 45 PUR 3d 88 (1962).

It would be against the public interest to hamper the growth of a utility's business for the purpose of enabling an unregulated industry to make more money. The fuel oil dealers object to letting the utilities offer inducements to increase the consumption of their products. But if the utilities could not attract new business their customers would have to pay higher rates, so that the economic consequences of the fuel oil dealers' proposal would be the same as if they were demanding that utility rates be increased to the point where nobody could afford to heat his house with gas or electricity. That would not be in the public interest.

In recent years the gas companies have been taking business from the oil companies, and, still more recently, the electric companies have been getting a small percentage of the heating business. The gas companies find themselves in much the same predicament that the railroads found themselves in when their former customers began to prefer to travel by bus or plane. The principle involved is that the public interest requires that the public be allowed to choose between competing public service companies the service that it prefers.

Motor buses have put the trolley lines out of business. In Petersburg, Hopewell and City Point Railway Company v. Commonwealth, 152 Va. 193, a trolley car line was rendering perfectly adequate service between Petersburg and Hopewell, but the Commission nevertheless issued a certificate to a motor bus carrier to parallel the car line. The court said (p. 202):

"The State is under no obligation to protect the car line, or to see that its operations are financially successful."

And at page 205:

"When people generally wish to travel in this way, they should be permitted to do so, and it is no sufficient answer to say that other carriers, in other ways, stand ready to give the necessary service."

It is the duty of the managers of a utility to do all they can to reduce costs. Every year the electric companies, for example, are buying bigger and more economical generators, they are building plants in the coal fields (which hurts the railroads), they are developing nuclear power plants (which hurts the coal industry), they are installing transmission lines of higher voltages, and they seek to persuade governments to lower their taxes. When their costs are reduced the savings inure to the benefit of the consumers in lower rates. The promotional allowances of gas and electric companies are likewise designed to reduce unit costs by increasing consumption.

Although the general concept of promotional allowances for certain uses of gas or electricity is not unlawful, several applications of it revealed by the record are. Virginia Electric

and Power Company (Vepco) gives an allowance of \$20 for an electric range when it is installed at the same time as an electric water heater (the water heater installation brings \$40) but an electric range otherwise installed entitles the owner to no allowance. There is no rational basis for this distinction, and therefore it is discriminatory. Vepco's gas department gives allowances for conversion to gas from all fuels other than electricity. It is understandable that Vepco does not wish to pay to induce an electric customer to become a gas customer, but if it is to offer allowances for conversions to gas it must do so uniformly and not discriminate against customers who convert from electricity.

In contrast, Washington Gas Light Company pays up to four times as much for conversions from electricity as it does for conversions from coal or oil. This discriminates against the consumers who receive the smaller allowances.

Of course, any promotional allowance that is not uniformly applied among the customers meeting its requirements is unjustly discriminatory. Both Appalachian Power Company and Natural Gas Service Company have adjusted bills or furnished free service in certain instances where heat was required to dry out a newly constructed house. The record showed other instances where incentives had been negotiated on a case by case basis. This is clearly unlawful. All of these specific discriminatory allowances are hereby disapproved.

The second major area of contention in this proceeding has been the development by the electric companies of underground distribution plans. These plans vary in detail considerably, but the basic concept is that a customer or builder desiring underground service must pay the average difference between underground and overhead construction cost to obtain it unless the residence or development is Gold Medallion or All Electric, in which event all or part of the difference in actual cost will be absorbed by the electric company.

The public is becoming more and more interested in underground distribution of electricity, and it is in the public interest to encourage such underground distribution. However, so long as the cost of underground is substantially more than the cost of overhead, the customer who receives the underground service must, in one way or another pay for it, regardless of whether underground distribution is voluntarily chosen or required by local ordinance. Otherwise, there would be an unjust burden on customers who are served by the less expensive but less desirable overhead method. There are a number of methods by which the customer can be required to pay for underground service. It can be done through cash payment of the actual difference in cost between underground and overhead, payment of the average difference in cost between underground and overhead, the establishment of a separate rate for underground electric service, the addition of an underground surcharge to existing rates or a credit based on anticipated revenues. So long as the method of repayment selected by the utility company is reasonable and not unjustly discriminatory, the method should be determined by the company and not by the Commission.

The underground distribution plans considered in this proceeding are, in general, combinations of the "average difference in cost plan" and the "credit for anticipated revenue plan." However, the credit is not given on a pure revenue basis, but rather is tied generally to the total electric concept, and this is what the gas companies find objectionable. In the future, beginning with the year 1967, we will require such plans to be based primarily on a pure revenue basis.

This proceeding has revealed that whereas most of the promotional allowances and practices of the electric and gas utilities are lawful and nondiscriminatory, not all of them are, and it appears that without adequate supervision in the heat of competition there is substantial opportunity for discriminatory concessions to be made. For these reasons we consider it to be in the public interest for the Commission to be fully and constantly aware of the promotional allowances and practices which the utilities have in effect in order that it may insure that none of them are unlawfully discriminatory and that none of them are administered in an unlawfully discriminatory way. To this end, henceforth each utility shall file a description of its promotional allowances and practices with the Commission.

- 1. Each utility shall, before January 1, 1967, file with the Commission new schedules giving in detail the terms and conditions governing charges for underground wiring or governing construction on the customer's side of the meter, and giving in detail all allowances of any kind. The schedules shall define each class of customer and each charge and each allowance so specifically as to leave no room for bargaining between the utility and the customer. The new schedules shall be effective on and after February 1, 1967, and shall supersede the schedules heretofore filed. Thereafter, no change in any such schedule shall become effective until thirty days after it has been accepted for filing by the Commission.
- 2. A utility may not, directly, or indirectly through a third person, promise that a customer will be satisfied with the cost of service. If it gives estimates of costs it must make it perfectly clear that an estimate is an estimate and not a guaranty or warranty.
- 3. A utility that sells appliances can guarantee that they will work properly and that it will take them back if they do not. It cannot guarantee that the customer will be "satisfied" in the sense that the customer can get his money back merely by saying that he is dissatisfied. Such a promise would enable the customer to get his money back if the costs exceeded the estimate and would give the estimate the force of a promise. For the same reason a utility may not agree to reimburse in whole or in part an

independent contractor who gives a guaranty that the utility could not give.

- 4. Allowances against charges for underground wiring must be based on estimated consumption and not on specified kinds of appliances used by the consumer.
- 5. An allowance given to any person for installing or procuring the installation of an appliance must be the same whether or not the appliance is substituted for an appliance already in use. If the appliance is substituted for an appliance already in use, the allowance must be the same regardless of the fuel used in the appliance already in use.
- 6. An allowance given for the installation of two or more appliances must be the sum of the allowances given for the installation of each of the appliances separately.
  - 1There is no objection to a reasonable guarantee of satisfaction so long as it excludes satisfaction with respect to cost of the electric or gas service.

# 20VAC5-300-30. Final order; implementing federal rules concerning cogeneration and small power production facilities. (Repealed.)

Pursuant to § 210 of the Public Utility Regulatory Policies Act of 1978 ("PURPA") (Public Law 95 617, Title II, § 210, 92 Stat. 3144, 16 USCS § 824a 3) the Commission entered an order on November 26, 1980, establishing the present case for the purpose of determining appropriate rates and provisions under said section for the above listed Virginia electric cooperatives ("Cooperatives"). By that same order, Cooperatives were directed to file proposed rates and information relating to the development of rates pursuant to PURPA § 210. The Commission also scheduled a public hearing for January 20, 1981.

By order dated January 13, 1981, the Commission allowed the Division of Consumer Counsel (Office of the Attorney General) additional time to file its information and made similar changes for filing protests and protestant testimony.

A public hearing was held before Charles W. Hundley, Hearing Examiner, on January 20, 1981, in the Jefferson Building, Richmond, Virginia. Counsel appearing were James V. Lane, for Cooperatives; Walter A. Marston, Jr., for the Virginia Hydro Power Association ("Hydro"); Eric M. Page, for the Division of Consumer Counsel, Office of Attorney General; and Glenn P. Richardson and A. Lynn Ivey, III, for the Commission. Protestant Jerry S. Rosenthal appeared prose.

One intervenor appeared at the hearing.

On March 6, 1981, the Hearing Examiner filed his report. Subsequent to that date, the Attorney General, Jerry Rosenthal, and Hydro filed exceptions to the report.

NOW, THE COMMISSION, having considered the record and the applicable law FINDS:

- 1. That Cooperatives avoided costs based upon Cooperatives cost of wholesale power is reasonable;
- 2. That each Qualifying Facility ("QF") with a capacity exceeding 100 KW shall negotiate the terms of its sale of electricity with Cooperative and that the Commission will stand ready to arbitrate in the event that an agreement cannot be reached:
- 3. That interconnection costs, as defined by FERC Rule, 18 CFR § 292.101(7), should be prepaid at the time of installation or over a period of up to three years, at the option of the QF, or over such longer period of time as may be mutually agreeable to the parties;
- 4. That, in cases in which QF's pay interconnection costs over a period of time, Cooperatives should be allowed to collect interest, the rate of such interest not to exceed the cost of Cooperatives most recent issue of long term debt;
- 5. That the record is inadequate to establish a metering charge, however, the costs associated with the installation of additional metering may be included as an interconnection cost;
- 6. That the QF should have the option of either a simultaneous purchase sale transaction or the sale only of its excess power; selection of such option shall be expressed in its contract and shall be for a period of not less than one year;
- 7. That Cooperatives shall revise their rates for the purpose of power from QF's in accordance with any permanent change in wholesale power costs;
- 8. That Cooperatives shall comply with the Staff proposal for the annual filing of cogeneration information with this Commission; accordingly,

#### IT IS ORDERED:

- 1. That on or before September 1, 1981, each Cooperative shall file revised schedules in accordance with the findings herein;
- 2. That each Cooperative shall file the following data with the Commission on or before March 1 of each year, beginning March 1, 1982 (such data shall cover the twelve months ending the previous December 31):
  - The name and location of each QF interconnected with Cooperative
  - The design capacity of each QF
  - The amount of energy purchased from each QF
  - The amount of energy sold to each QF
  - Copies of any contracts entered into between Cooperative and QF's

- Avoided cost data of the type required by 18 CFR \$ 292.302

3. That, there appearing nothing further to be done in this matter, the case be dismissed from the docket and the papers placed in the file for ended causes.

# 20VAC5-300-50. Natural gas industrial rates and transportation policies. (Repealed.)

On April 4, 1986, the Commission issued an order establishing a rulemaking proceeding to reassess natural gas industrial rates and transportation policies in Virginia. This hearing resulted from the changes in the natural gas industry most immediately caused by the issuance of Order 436 by the Federal Energy Regulatory Commission (FERC). This Order is altering the traditional roles of the various components of the industry producer, pipeline, local distribution company and end user. While the impetus and control of much of the change remains at the federal level, the successful operation of the FERC induced programs will be determined by the approach taken by state commissions in the implementation on the state level.

The changes have been fueled by a number of factors: decontrol of wellhead gas prices, the decline in oil prices, the competition given our domestic gas industry by Mexican and Canadian gas, the advent of the spot market and contract carriage provisions. Since 1980 the industry has seen an excess supply of gas. This has resulted in increased risk to producers and pipelines under the traditional marketing functions and increased pressure by industrial users to have available a mechanism to obtain natural gas at lower prices. Devices such as Special Marketing Programs, shifts in the allocation of fixed costs in demand and commodity charge components of the minimum bill, and elimination of variable costs from the minimum bill were precursors of the present FERC attempts to enable the natural gas industry to respond to the very real competitive forces in the marketplace.

The federal government through FERC has determined that users of natural gas in this country will benefit if they are given the option to purchase gas directly from the producers and have it transported by the pipelines to their point of use. This policy dramatically alters the traditional role of the interstate pipeline, the intrastate pipeline and the local distribution company. This policy decision, embodied in FERC Order 436 and now expanded in Order 451, poses substantial practical and philosophical problems. The restructuring of this industry cannot happen quickly and the fruits or disadvantages of this move will take even more time to realize and evaluate.

While this shift began on the federal level and initially involved those entities subject to the jurisdiction of FERC, local distribution companies and intrastate pipelines as an integral part on the industry, must also adjust to the new way of doing business. Failure to do so clearly would frustrate

national policy. As in the telecommunications industry, it is now incumbent on the local utilities and state regulators to make federal policies work for the public good.

In our April order, we invited interested parties to participate in this rulemaking proceeding, directed Staff to complete its investigation and file its analysis and report, and further, identified several critical issues which the Commission hoped parties to the proceeding would address and which the Commission believed needed to be addressed to facilitate the transition of the natural gas industry in Virginia to a more competitive environment.

As noted in the order establishing the rulemaking proceeding, the Commission has received numerous formal as well as informal requests for guidance and analysis of specific problems related to industrial rate design and transportation policies. Some of the problems which have been raised in those inquiries and proceedings can and should be most effectively decided on a general basis to facilitate a more orderly development of the regulatory scheme. However, although we intend to address many of the problems, this proceeding and this order are intended to provide only a framework for the development of the natural gas industry in Virginia. Actual rates and company specific considerations should and will be taken into account on a company by company basis within the framework established herein.

Beginning on June 17, 1986, the Commission conducted public hearings to receive testimony and comments from interested parties on the development of an appropriate rate design for industrial rates and transportation policies in general. A number of diverse parties provided input on the issues raised by the Commission and by the Staff report. The Commission would like to thank all parties for their contributions in this proceeding and their efforts to suggest a reasoned and equitable approach to this new and still changing environment.

Appearances were entered by Edward L. Flippen for Anheuser Busch Companies, Inc. (Anheuser Busch), BASF Corporation (BASF), James River Corporation (James River), Owens Illinois, Inc. (Owens Illinois), Reynolds Metals Company (Reynolds), and Westvaco Corporation (Westvaco); Fielding L. Williams, Jr. for Celanese Smoking Products, a Division of Celanese Corporation (Celanese); Charles F. Midkiff and Louis N. Monacell for Allied Corporation (Allied); Anthony Gambardella for the Division of Consumer Counsel, Office of the Attorney General (Consumer Counsel); Eric M. Page and David B. Kearney for the City of Richmond (Richmond); Guy T. Tripp, III and James F. Bowe, Jr. for Virginia Natural Gas (VNG); Donald R. Hayes for Northern Virginia Natural Gas, a Division of Washington Gas Light Company (NVNG); Wilbur L. Hazlegrove for Roanoke Gas Company (Roanoke); Stephen H. Watts, II for Commonwealth Gas Services, Inc. (Services), Lynchburg Gas Company (Lynchburg), Columbia Gas of Virginia, Inc. (Columbia) and Commonwealth Gas Pipeline Corporation (Pipeline); Allan E. Roth for Columbia; John S. Graham, III for Equitable Resources Energy Company; and Deborah V. Ellenberg for Staff.

#### **TESTIMONY**

Representatives from Anheuser Busch, BASF, James River, Owens Illinois, Reynolds and Westvaco came forward to testify on their own behalf. In addition, those industrial companies jointly supported the testimony of Dr. Roy Shanker, an economic consultant. That group of industrial end users urged the Commission to recognize that competition and increased transportation are in the public interest. They further urged the Commission to unbundle transportation related services, develop cost of service rates for those services and allow such rates to be downwardly flexible to the variable cost of service. They also stated that the Commission should require Pipeline to make its upstream Columbia Gulf transportation capacity entitlement available to its contract demand customers upon their request. The industrial companies further recommended that, to implement the policies developed in this proceeding, utilities be directed to develop and file cost of service studies and to file embedded cost of service transportation rates pursuant to those studies within twelve months of the date of this order. Dr. Shanker testified that embedded cost rates will eliminate most of the economic incentives for bypass. Mr. Flippen, counsel for the six industrials, stated further that the Commission need not address the question of bypass unless and until an actual case arises. Finally, those parties supported the concept of flexible interruptible retail rates and recommended the ceiling be based on the embedded cost of service and the floor on the utility's marginal cost of service.

Celanese presented one witness who urged the Commission to adopt flexible transportation rates within cost of service parameters. Celanese's witness also stated that standby service for transportation customers should be provided at carefully considered and unbundled rates.

Allied presented one witness, John Brickhill, who urged the Commission to encourage voluntary transportation by taking a company's participation into account in establishing an appropriate return on equity or by not allowing utilities to pass on to remaining customers the fixed costs associated with lost load which could have been averted through transportation. He also testified that the Commission should address the problems associated with the allocation of upstream transportation capacity and urged the Commission to look at the long term impact on end users, not simply at Pipeline's current cost of gas. He asserted that customers must rely on the long term ability to transport gas, not simply transportation of spot market purchases. Allied argued that transportation rates should be based on an embedded cost of service design and should be downwardly flexible if retail sales rates are downwardly flexible. It said that flexible

pricing must be closely scrutinized to prevent anticompetitive abuses. Mr. Brickhill stated that rate design should, promote competition and fairness by application of cost causation principles in a manner which would avoid undue rate shock. He observed that now would be a good time to move to parity as gas costs overall are declining. The impact therefore would be minimized.

The Consumer Counsel presented the testimony of Mr. Steven Ruback. He stated that local distribution companies (LDCs) should lower their system average cost of gas and that the Commission should concentrate on reviewing the utility companies' purchasing practices. With regard to rate design, the Consumer Counsel recommended rates be based on the same non gas margin contribution as if the customer had purchased gas from the LDC under a non flexible rate schedule. This, he argued, would make both customers and utility companies indifferent as to whether a customer transports or purchases gas from the utility. Mr. Ruback stated that such a margin approach would avoid price signals which encouraged a customer to switch to transportation and thereby make a lower contribution to a utility's fixed costs. He further urged that interruptible flexible retail rates be addressed on a company specific basis and that the floor should be based on the highest commodity cost of gas. Further, the Consumer Counsel cautioned the Commission against making spot market purchase dedications to particular customers and stated that such inappropriate dedications would result in unjust and preferential rates.

Richmond presented the testimony of one witness, Michael Moore. Mr. Moore agreed with most other parties that increased competition and transportation are in the public interest. Mr. Moore also urged the Commission to address the allocation of upstream capacity and stated that customers must have the assurance that upstream capacity will be available or there will be a resulting disincentive to transportation. Moreover, he stated that such allocation should be available to Pipeline's customers since they pay the contract demand costs to reserve the capacity.

Virginia Natural Gas, through its witness, Ann Rasnic, also urged the Commission to find as a matter of policy that transportation is in the public interest. It also urged the Commission to consider allocation of upstream capacity and argued that the customers of Pipeline need the assurance that transportation will be available through that upstream capacity to facilitate economic and reliable service to the enduser. VNG supported staff's recommendation that transportation rates be designed on an embedded cost of service basis, with some contribution to contract demand costs included in interruptible rates. Ms. Rasnic urged the Commission to retain interruptible flexible retail rates within specific parameters. She recommended the floor be based on a utility's weighted average commodity cost of gas (WACCOG) unless the utility can show that something less than that WACCOG is necessary to compete with alternate

fuels and still provides a net benefit to the firm customer. VNG also recommended that the ceiling of the authorized range should be the firm industrial sales rate. Finally, VNG suggested the Commission support the general concept of an incentive proposal which would encourage a utility company to maximize throughput from interruptible sales and transportation volumes. Under the mechanism, any shortcomings or additional revenue generated over a target level would be shared between stockholders and ratepayers according to the risk borne by each. VNG stated that the proposal is in the public interest because it reduces the need for base rate changes by eliminating severe shifts in utility earnings and further, it provides an incentive to increase throughput resulting from interruptible sales transportation volumes which, of course, is in the public interest of all parties.

Northern Virginia Natural Gas (NVNG) also participated in the rulemaking proceeding and presented two witnesses, Jack Keane and Frank Hollewa. NVNG stated that, as a general matter, the transition from a regulated environment to a market driven environment will impact each local LDC differently according to each company's size and load profile; accordingly, it recommended that this rule making should only present broad guidelines to provide flexibility for company operations. Moreover, NVNG supported a gradual phasing out of the industrial subsidy of firm rates. In addition, transportation, the company asserted, should be voluntary or with some provision for waiver or exemption and should only be offered on a interruptible basis until more experience is gained with the service. It also recommended the establishment of minimum criteria, by each LDC, relating to size, delivery point, and contract term. Transportation rates, NVNG stated, should be flexible and market driven. NVNG said interruptible flexible retail rates should be established within a floor based on an LDC's WACCOG and each LDC should be allowed to dedicate a specific package of spot market gas to an industrial customer.

Roanoke did not introduce the testimony of any witnesses; however, its attorney, Wilbur Hazlegrove stated the company's position. As a general policy matter, he stated that the LDC was charged with protecting the firm residential customers and that there was no obligation to serve industrial customers. He was doubtful that the Commission would be able to handle a transition to a market driven environment smoothly and cautioned the Commission to proceed slowly, concentrating on more pressing problems, such as the take orpay costs issue before FERC. He stated that there was no need to mandate transportation, as the industry was already responding to the competitive market. He called transportation effectively a bypass of the utility system supply and stated that the traditional distributor monopoly of gas supply would soon be replaced by "a proliferation of purchasers chasing an inadequate gas supply with big bucks."

Industrial rates and transportation policies, he urged, should be developed on a company specific basis.

Pipeline, Columbia, Services and Lynchburg presented their comments through their counsel, Stephen H. Watts, II. By its statement of position on future allocation of upstream pipeline capacity dated June 24, 1986, Pipeline stated that it has voluntarily allocated its upstream transportation capacity among its five contract demand customers pursuant to mutual agreement. It recognized the customer's need to be able to rely on such an allocation to make longer term gas purchase commitments and stated that it would not revoke the upstream allocation provided to its customers without thirty days notice. Pipeline stated that the issue relative to the allocation of upstream capacity must be decided in terms of a utility company's public service obligation to use its available resources to offer reliable supply at lower cost for all of the customers. However, it requested Commission guidance on the allocation question.

Pipeline was also concerned that any policy decisions rendered in this proceeding should not displace the stipulation filed by several parties in Pipeline's recently concluded rate case. I In that case Pipeline had proposed cost based transportation rates within and outside of contract demand (CD), provided a methodology for sharing capacity between CD customers and provided equal priority for transportation and sales gas volumes within firm and interruptible classifications. Pipeline expressed concern with the impact of transportation in the long run since the current market instability is due to temporary and extraordinary conditions. Pipeline also urged the Commission to address the bypass question.

On behalf of Columbia, Mr. Watts stated transportation rates ideally should be based on the non gas sales rate schedule margin, since there is not a significant difference between the non gas cost of providing transportation service and the cost of delivering gas for sale to its customers. However, under conditions where the price is being set by the market, he stated fixed transportation rates will result in a loss of throughput and accordingly, Columbia recommended flexible transportation rates.

Services agreed that industrial transportation rates should be fully allocated and distributed according to class cost of service studies with class rates of return moving towards parity. Services also urged that industrial rates be downwardly flexible with a floor based on a utility's variable cost of gas sold to the industrial customer. Transportation rates, it urged, should be the non gas component of the applicable sales rates and should be downwardly flexible to allow competition and prevent bypass.

Lynchburg urged the Commission to consider and maintain flexibility in any policy or framework adopted in this proceeding to allow LDC's to compete with nonregulated markets. Lynchburg also stated that there was not a need for

the Commission to mandate transportation. Lynchburg itself offers firm and interruptible transportation but has not had a request for either type of service.

Mr. Cody Walker appeared on behalf of the staff. He indicated that a mandatory carriage policy was not necessary but incentives should be developed to encourage voluntary participation.

Staff recommended value of service rates be retained for retail interruptible sales. Mr. Walker stated that the parameters between which flexible rates could vary on a month to month basis should be based on cost of service considerations. The fluctuation of the rate within the established range could vary as necessary to compete with competitive alternative fuel prices. staff recommended that the floor of the flexible rate range be equal to a utility company's highest commodity cost of gas plus adjustments for taxes and unaccounted for gas, unless the utility shows that a lower floor is necessary to compete with alternate fuels and further, that a lower floor still provides a net benefit to the firm customers. Mr. Walker supported a ceiling based on the same rate of return as provided by the firm industrial rates.

Staff recommended that transportation rates be designed on an embedded cost of service basis. Incorporated into that recommendation, staff included a contribution to compensate firm customers for the interruptible customer's use of excess capacity because it is reasonable to allocate some of the demand costs to interruptible customers as rent or compensation for use of the facilities. Staff did not support flexible transportation rates.

#### TRANSPORTATION POLICY

The increase in competition in the natural gas industry has clearly been in the public interest. Competition at the wellhead has already served to lower gas costs overall and nondiscriminatory transportation has stimulated that competition. Even nonparticipating customers benefit from transportation due to the increased pressures on utility companies to lower gas costs overall to more effectively compete. Moreover, a company which effectively competes can increase the throughput on its system and again lower costs for all its customers. In addition, transportation provides one more market option which a utility can offer its customers and consequently maximizes the requisite flexibility necessary to compete with a variety of alternatives. We agree with the majority of the parties to this proceeding that transportation of natural gas is in the public interest. However, it is not necessary to mandate that all utility companies file transportation tariffs and provide that carriage. As many parties observed, as a practical matter, most Virginia utility companies who have a demand for transportation on their systems have effective transportation tariffs on file with this Commission. Although we will not mandate transportation, we intend to encourage voluntary participation

in transportation programs. This Commission will review individual company practices in future rate cases to assure that each company maximizes utilization of its system. Several means to encourage transportation were suggested by several parties in this proceeding. We will be critical in the event load is lost as a result of a company's failure to transport. Such loss will be taken into account in setting rates. Appropriate measures will necessarily be taken into account in each company's rate case to preclude penalizing a company who has no demand for transportation for its failure to provide transportation.

#### **INTERRUPTIBLE RETAIL RATES**

This Commission has historically embraced the flexible rate as a viable mechanism to provide utility companies with the flexibility necessary to compete with unregulated alternate fuels. In January of 1984, the Commission first approved a flexible rate for Washington Gas Light Company.2 In the final order issued in that case we stated that:

We are confident that a flexible rate is required in order for the Company to remain in the competitive market of interruptible customers. If the Company were to lose its entire interruptible load, there would be an automatic shifting of significant non gas costs to all firm customers. Hence, the economic viability of the Company hinges upon its ability to generate revenues from interruptible customers, and to do so it must have a flexible pricing structure to compete in that market.

That principle has been restated in numerous proceedings addressing flexible rates. As the gas industry moves toward a more competitive market it is even more essential that utility companies retain the flexibility available through measures such as flexible rates to be able to respond to the marketplace.

Although most parties to this proceeding generally supported the basic concept of a flexible rate, the suggested parameters of that mechanism varied. VNG suggested that it was more appropriate to establish the floor based on a company's weighted average commodity cost of gas (WACCOG) plus appropriate adjustments. Further,

VNG suggested that the ceiling be equal to the large volume firm sales rate, rather than simply incorporating the return included in the firm rate as suggested by staff. In addition, several parties recommended establishing a floor based on the utility company's spot market purchases or, in other words, to allow utilities to dedicate their cheapest purchases to the most elastic customers.

Several parties also cautioned that each utility company's situation will be different and will depend in part upon load profiles and purchasing practices. Accordingly, those parties recommended that flexible rates should be reviewed on a company specific basis.

Although we agree that specific provisions may vary based on an individual company's market and operating characteristics, basic guidelines can be established to provide a uniform approach to companies' flexible rates. We conclude that the floor of a flexible rate should be based on the highest commodity cost of gas or if more than one supplier furnishes gas, the floor should be the weighted average commodity cost of gas. If, and we emphasize "if," the utility can demonstrate that a lower cost is necessary to compete with alternate fuels and further, that the firm or core customer still receives a net benefit from retaining the interruptible sale, the lower price will be accepted.

As pointed out by several parties, the point at which the price necessary to retain an interruptible sale no longer provides a benefit to the system will vary significantly from company to company. Accordingly, it is reasonable to establish the starting point for the floor at the highest commodity cost and allow companies to offer proof that something less is necessary and still beneficial on a case by case basis. That test will of course reflect an analysis of several factors, foremost of which will be the incremental cost of gas acquired to serve the interruptible load. To facilitate a direct comparison it may be appropriate to assume the benefits of retaining the interruptible load will coincide with the immediate impact on gas costs.

We will necessarily be cautious about allowing companies to dedicate spot market purchases to the most elastic customers. The Commission must be particularly sensitive to the protection of the inelastic core customers. A rate design which results in inelastic customers subsidizing the elastic customer is clearly improper. Economic purchases should not be made solely for elastic customers to the exclusion of purchases for system supply. The authority to make such a dedication to the most elastic customers would also eliminate one incentive for a company to minimize its general system costs. With a low price necessary to compete with alternate fuels in the current market, a captive customer, or one with no ready alternative, might be assessed the higher cost of gas without close regulatory scrutiny. We caution all utility companies to review their general system purchasing practices and to fulfill the statutory obligation to provide reliable utility service at a just and reasonable cost.

The customer charge component of the rate should reflect the fully distributed costs of providing the interruptible service. We will closely review this in rate filings.

Finally, at this point in the evolving competition in the gas industry, we concur with the recommendations of most parties that it is prudent to move gradually toward parity of return in firm industrial rates. Such movement must be gradual to minimize rate shock to residential customers and carefully evaluated at each step.

#### TRANSPORTATION RATE DESIGN

A number of parties recommended the embedded cost of service rate proposed by staff to be established as a maximum transportation rate and that the utility companies be afforded the flexibility to adjust the transportation rate downward from that embedded cost of service level to the marginal cost of providing transportation service. There are problems, however, associated with flexible transportation rates. The value of transportation to individual customers will vary on the basis of a number of different factors. Unlike the flexible retail rates, there is not a readily identifiable alternate source of competition to transportation. Transportation may occur due to any one of a number of factors ranging from wellhead cost of gas to alternate fuel prices. To respond to these variables, the utility would need to apply a different rate for each customer and would consequently engage in discriminatory ratemaking between similarly situated transportation customers. Such a framework would also result in problems with effective regulatory review problems.

The Consumer Counsel recommended a different approach to the design of transportation rates. Its witness, Mr. Ruback, recommended basing transportation rates on the non gas margin of the applicable retail sales rate which would otherwise be available to that customer. He stated the benefit of this rate design approach would be the utility's revenue neutrality relative to a customer's election to transport its own gas or purchase from the utility. At the public hearing, the Consumer Counsel further clarified that its margin approach should be limited to nonflexible rate schedule margins.

Other parties observed that such a margin approach could be a goal if industrial retail rates were already based on costcausation principles, however, based on current rate designs, the nonflexible margin approach results in unworkable and uncompetitive rates. Such an approach would effectively eliminate transportation as a service option in Virginia, thereby compounding the current problems with competitive fuel prices. In addition, the Consumer Counsel's limitation on the margin approach to nonflexible rates would not result in the company's operations being revenue neutral. An alternate fuel user who could purchase gas under an interruptible flexible rate schedule would not be purchasing gas under the firm large volume rate schedule as its alternative to transportation service and accordingly, its choice between a flexible sales or transportation service would not result in a revenue neutral situation. If the limitation to nonflexible rate schedules were removed and transportation rates were based on the appropriate margin, a wide range of rate levels would be charged to transportation customers despite the fact that the customers were all receiving the same type of service.

We will direct that an embedded cost of service approach to transportation rate design be applied on a company by company basis for both firm and interruptible transportation service. Over time, the non gas margin of the industrial sales

rates will be more closely aligned with the transportation rates, however at the present time we must provide viable competitive options for utilities to offer their customers. Moreover, since the growth in transportation service is a recent phenomenon, development of embedded cost of service transportation rates at the present time will not result in rate shock to the captive customers. An immediate elimination of the subsidy currently being provided by industrial customers in the retail rates would, however, result in rate shock. We would note, however, that, with the recent drop in oil prices, the impetus to shift much of the fixed costs of the utility to firm customers is already in place.

An interruptible customer does not contribute to the fixed cost of capacity associated with peak demand and such service is inferior to firm service, since it is interrupted during periods of peak load; however, the interruptible service is provided through the same facilities as firm service. Therefore there should be some compensation by the interruptible customer to the firm customer for the use of that excess capacity. The contribution will vary from company to company, again depending on the customer mix and load profile, and therefore should be specifically addressed on a company by company basis. The demand allocation applied in each case should reflect the operating characteristics of the company.

To facilitate and expedite implementation of the framework established herein, all gas utility companies should conduct class cost of service studies and file them with the Commission within the next 12 months. Exemptions from this filing requirement, upon proper petition, may be considered for small gas utilities with limited industrial loads and who have not received requests for transportation service. Any tariffs filed should be based on cost of service studies. Those companies who do not intend to file rate cases in the next 12 months, should file limited applications to revise their transportation rates where transportation is being offered in accordance with the findings herein within that same 12 month time period.

#### **UNBUNDLED SERVICES**

There was overwhelming support for an approach to rate design which identifies the several services which a utility provides and separately determines the fully allocated costs of providing each service. Unbundling services in this way provides a menu from which a customer can tailor the type of service and degree of reliability appropriate for that customer. The extent to which unbundling occurs will again vary from company to company and accordingly should be evaluated on that basis, however, it provides a reasonable approach to rate design at a time when the industry is becoming more competitive in the services offered. Transportation and standby retail service are two examples of services which can be easily unbundled from the traditional retail sale and provided on an individual basis.

## ALLOCATION OF UPSTREAM TRANSPORTATION CAPACITY

One of the foremost concerns raised in this proceeding relates to the proper allocation of upstream transportation capacity. At the present time few interstate pipeline companies have agreed to become open access transporters. Columbia Gas Transmission Corporation, a primary interstate supplier for Virginia, and Columbia Gulf are, however, open access transporters. Because they represent a major supplier for the east coast, tremendous demand has been placed on them for transportation. This has resulted in demand exceeding capacity available and raised serious questions concerning the allocation of transportation capacity on their pipeline facilities.

The FERC recently addressed the problems with allocation of Columbia Gulf's main line capacity. The FERC defined the "first-come/first-served" methodology which was first described in FERC Order No. 436. The FERC has generally outlined the allocation of transportation capacity to Columbia Gulf's wholesale customers, both for its customers' system supply and for the wholesale customers' end users through March 31, 1987. The FERC directed that in making monthly nominations, the wholesale customers should include any requests for service by their customers. While addressing the Gulf capacity allocation generally, the FERC by Order Approving a Settlement Offer with modifications in FERC Docket No. RP86 14 004 dated March 28, 1986, stated at page 19 that "the relationships between Columbia Gas' wholesale customers and the end users they serve is properly a matter of local concern, to be determined by each customer with its end users and is subject to state regulatory agency oversight and/or regulation."3 Commonwealth Gas Pipeline as a direct customer of Columbia has received an allocation of Gulf capacity pursuant to this settlement. Initially, Pipeline used its allocated capacity to purchase spot gas for its system supply, thereby lowering the per unit cost of gas to all customers equally. Pipeline was informed that this arrangement did not comply with the terms of the PGA settlement with FERC. As result Pipeline released its capacity to its direct customers who in turn agreed to an allocation formula. Pipeline has five direct customers Virginia Natural Gas, Suffolk Gas, the City of Richmond, Allied and Commonwealth Gas Services. Presently, Pipeline is operating on a shared allocation basis; however, the stated policy of the company continues the ability to revoke the shared allocation on thirty days notice.

Pipeline and its customers have asked for Commission guidance on the proper allocation of Pipeline's entitlement to upstream transportation capacity. Although the problem will be somewhat relieved in the event that other interstate pipelines serving Virginia become open access transporters, the problem clearly must be addressed now at least for the short term period.

Many parties urged the Commission to provide some assurance on the availability of upstream capacity. They are interested in acquiring supply for the longer term, not solely from short term spot market purchases. To do this they need more than thirty days assurance of transportation. Moreover, they argue that Pipeline's customers pay the contract demand associated with reserving capacity upstream and, accordingly, should be able to elect to use that capacity or to ask Pipeline to use the capacity to minimize its commodity cost of gas. In making that decision, those customers of course would weigh their own ability to purchase gas at economic prices relative to the price of their supplier.

The Commission recognizes that if gas transportation is to work effectively and efficiently, those who wish to transport gas must have some assurance that the capacity to transport will be available. Without that assurance, these users are forced to purchase system supply or leave the system for alternate fuels. All of Pipeline's LDC customers have indicated that obligation can be best fulfilled by passing the upstream allocation on to them. Accordingly, the choice should be Pipeline's customers. We will monitor this situation as other interstate pipelines become open access transporters and understand that the time may come when such allocation may be unnecessary, impracticable or impossible. Although not bound by the FERC settlement, we encourage local distribution companies to utilize policies which afford a degree of reliability for transportation capacity usable by their transportation customers.

#### **BYPASS**

The issue of bypass was also identified in this proceeding. We define bypass to mean direct connection by an end user to an interstate or intrastate pipeline, thereby bypassing the certificated local distribution company. This issue involves the economic incentives for bypass as well as its legality under present law. The Commission believes that appropriately designed embedded cost of service rates should eliminate the economic incentives for bypass. This will of course require the good faith efforts of both the customer and the utility. In any event, the Commission does not believe the record before us is adequate to resolve the legal issue at this time.

#### STANDBY SERVICE

The industrial companies represented in this proceeding generally agreed that they should bear the risk of their election to transport gas for themselves rather than rely upon their traditional local distribution company. Clearly, if a customer elects transportation and should not also elect a standby service, the utility company does not have a continuing public service obligation to sell gas to that customer. By placing the responsibility where it belongs, on the customer to elect what type of service it wants to take, the gas company can retain some predictability in its requirements, a predictability which is necessary for it to

make its own system plans. Standby service should be offered at compensatory rates.

#### OTHER TERMS AND CONDITIONS

Any investments made to specifically serve a new transportation customer should be recovered from that customer; accordingly each utility company should provide some type of guarantee through customer charges, minimal purchase requirements, minimal monthly payments, contract terms or some other means to assure recovery of the investment from the specific customer.

We recognize that there are some circumstances in which penalties may be necessary to prevent gross abuses of system availability and to prevent large or disparate operating practices. Penalties should not be designed to be onerous and a disincentive to transportation, but rather should be compensatory for any additional cost which may result from the operating problems. Application of penalties should be addressed by each company on a company specific basis.

Adjustments for unaccounted for gas should be made to account for any difference in deliveries where such differences can be practically identified, for example deliveries through temperature compensated meters vs. non-temperature compensated meters.

We have concern over tariff conditions imposing minimum terms or volumes and other conditions which may be contrary to the market. We will closely review the reasonableness of terms and conditions which may be included in company tariffs.

In conclusion, we want to commend all participants in this proceeding. This is an uncharted course for the industry, consumers and regulators. Proposals other than those adopted herein have been offered. We are confident the changing nature of this industry will give rise to even more approaches to these issues generally and as they relate to a specific company. It is essential that dialogue continue examining the broader policy questions as well as specific rate designs and the performance of the market and industry. We must be aware of all reasonable options to maintain our ability to provide effective and innovative regulation which will allow us to meet the goal of reliable gas service at a reasonable price for the public good.

NOW, THE COMMISSION, having considered the record and the recommendations of the parties is of the opinion and finds:

- 1. That increased competition and transportation are in the public interest and the voluntary participation in transportation programs should be encouraged;
- 2. That interruptible flexible rate mechanisms are reasonable and should be retained. The parameters should reflect a floor and ceiling consistent with the discussion above:

- 3. That interruptible rates should include a customer charge which recovers the fully distributed cost associated with that service;
- 4. That firm industrial rates should be developed to move gradually towards the fully distributed costs of service;
- 5 That transportation rates should be based on the fully distributed costs as recommended by staff;
- 6. That all gas utility companies should conduct cost of service studies to facilitate implementation of the policies established herein and file them within the next 12 months;
- 7. That the rate design goals and terms and conditions of transportation service discussed herein shall be applied to gas companies in future rate cases;
- 8. That services should be unbundled to the extent practicable. Standby service at compensatory rates should be made available to all customers. However, those customers not electing such standby service bear the risk associated with the decision to rely on transportation gas; and
- 9. That the terms and conditions of transportation service should be developed consistent with the discussion herein. Accordingly,

#### IT IS ORDERED:

- 1. The findings and policies discussed and established herein shall be applied in rate cases or limited issue applications filed by gas companies subsequent to the date of this order; and
- 2. There appearing nothing further to be done in this proceeding, this docket shall be closed and the papers placed in the file for ended causes.
  - 1By Final Order dated July 11, 1986, the Commission did not adopt the Stipulation in its entirety. Case No. PUE850052, Application of Commonwealth Gas Pipeline Corporation, to revise its tariffs Appeal to the Supreme Court pending.
  - 2Application of Washington Gas Light Company for a change in its gas interruptible rate and other tariff provisions, 1984 SCC Report 395.
  - 3We note that the FERC allocation order is effective only through March of 1987, at which time it will likely be reevaluated.

# 20VAC5-300-60. Order adopting policy statement for recovery of costs associated with take-or-pay liability. (Repealed.)

On August 7, 1987, the Federal Energy Regulatory Commission ("FERC") entered Order No. 500 in its attempt to mitigate the effects of take or pay liability. In that Order, FERC announced its adoption, on an interim basis, of two

pass-through mechanisms to spread the liability associated with take or pay contracts throughout all segments of the gas industry. As we noted in our July 6, 1988 Order for Notice and Comment, as a result of FERC's action, large amounts of take or pay liability are being or have been authorized to be passed from interstate gas pipelines to downstream gas utilities, including those in Virginia. Some Virginia gas utilities are currently passing take or pay related costs through their purchase gas adjustment ("PGA") clauses to their customers. Because of the potential impact these costs may have on Virginia gas utilities and their ratepayers, we have initiated the instant docket to consider adoption of a policy which will provide for the opportunity to recover these costs in the most equitable and efficient manner possible. We considered the following policies:

- (1) Automatic recovery of take or pay costs in the same manner that contract demand charges are recovered through utility purchase gas adjustment clauses (hereafter policy option 1);
- (2) Allocation of costs associated with fixed surcharges to both firm and interruptible gas commodity costs (hereafter policy option 2);
- (3) Recovery of take or pay fixed surcharges on the basis of estimated gas transportation volumes and commodity sales. If this approach were adopted, a utility would be permitted an opportunity to recover the costs associated with fixed take or pay surcharges during a defined time period. The opportunity to recover these costs would be the same as the opportunity to recover any other costs during the specified period. A formula could be developed to determine the acceptable estimates of throughput, including known and definite load losses, customer growth, normal weather, and the utility's ability to compete. The take or pay fixed surcharges would terminate at the end of the specified time period (hereafter, policy option 3).
- (4) Allocation of take or pay liability on the basis of customer purchase deficiencies. This policy alternative would use a base purchase period against which recent sales purchases could be compared. Costs associated with fixed take or pay surcharges could be apportioned in relation to the decreases in sales volumes purchased by gas customers. This policy alternative resembles the Order No. 500 allocation mechanism employed by FERC (hereafter policy option 4).

In our July 6th Order, the Commission invited interested parties, including the staff and jurisdictional gas companies, to file written comments addressing the factual or legal issues related to the four policy alternatives described above. In addition, interested parties were given the opportunity to request oral argument.

In response to that invitation, 22 parties filed comments, and nine requested oral argument. Parties filing comments included: Southwestern Virginia Gas Company ("Southwestern"), United Cities Gas Company ("United"), James River Corporation ("James River"), General Electric Company ("GE"), Commonwealth Gas Pipeline Corporation ("Pipeline"), Columbia Gas of Virginia ("Columbia"), Lynchburg Gas Company ("Lynchburg"), Northern Virginia Natural Gas and Shenandoah Gas Company ("WGL Companies"), the City of Richmond ("City"), Hadson Gas Systems, Inc. ("Hadson"), Westvaco Corporation ("Westvaco"), Anheuser Busch Companies et als. (Anheuser-Busch), Virginia Industrial Gas Users ("Industrial Users"), Virginia Natural Gas, Inc., ("VNG"), Suffolk Gas Company ("Suffolk"), Allied Signal, Inc. ("Allied"), Commonwealth Gas Services, Inc. ("Services"), and Roanoke Gas Company ("Roanoke"). The Commission's staff ("staff") also filed comments. The Division of Consumer Counsel did not participate in this proceeding. On July 20, 1988, we issued an order reserving the afternoon of July 29, 1988, for oral argument.

#### I. SUMMARY OF COMMENTS AND ARGUMENT.

Many of the local gas distribution companies, Pipeline, and industrial customers served by both LDCs and Pipeline supported policy option 1, i.e., recovery of take or pay related fixed surcharges through the demand portion of the PGA, in their comments. Commentators supporting option 1 or a variation thereof included Pipeline, Lynchburg, Columbia, WGL, Westvaco, Anheuser Busch, Cos., Inc., Celanese Fibers, Inc., Owens Illinois Company, IBM, Allied, and VNG. Advocates of this policy alternative generally argued that since the customers, not the utility, received the benefits of lower wholesale costs of natural gas through the PGA, it was appropriate for these customers to now receive take or pay costs through the PGA as offsets to the earlier savings.

Several of the gas utilities supporting option 1 argued that the Commission could not adopt any policy that purposefully disallowed recovery of take or pay costs by means of an allocation scheme which would not permit recovery of these costs, nor could it disallow these costs absent a showing that they were imprudently incurred. These companies stated that any disallowance of these costs would, absent a showing of imprudence, violate the filed rate doctrine. Nantahala Power & Light Co. v. Thornburg, 76 U.S. 953 (1986). Appalachian Power Co. v. Public Service Comm'n of West Va., 812 F.2d 898 (4th Cir. 1987). They asserted that these cases held that the Commission could not find that federally mandated takeor pay costs were imprudently incurred by Virginia utilities as a group or individually in the context of this proceeding. Indeed one commentator suggested that these cases could be read as preempting the Commission from disallowing Pipeline's recovery of Order No. 500 take or pay demand charges. Pipeline's Comments at 25.

Commentators supporting option 1 did so because they found it to be administratively convenient and because it assured complete cost recovery. In addition, many of the industrial end users favoring PGA treatment for take or pay dollars depend upon transportation of spot purchases or interruptible sales service to satisfy the bulk of their gas supply needs. End users receiving such services are generally not subject to the PGA of the gas utilities serving them for those services.

Many of these same commentators took the position that the second and third policy options would not allow gas utilities to compete with alternate fuels since addition of associated surcharges would render gas service noncompetitive with the prices of these fuels. Several parties further urged the Commission to reject the cumulative deficiency approach as a form of illegal retroactive ratemaking, and as difficult to administer, given the diverse and changing customer population of LDCs.

Some of the commentators supported options other than PGA recovery or modifications of PGA recovery. For example, United Cities supported recovery of take or pay costs on a volumetric throughput basis to be applied to all sales and transportation services. In support of this option, United Cities noted that it would recover costs from the broadest possible base of customers.

Columbia and Lynchburg's joint comments urged that recovery of the fixed surcharges should reflect the distinct nature of the costs. They maintained that reformation costs, which are essentially forward looking, should be charged through the PGA to both firm and interruptible sales customers. However, because past take or pay liabilities represent transitional costs, Lynchburg and Columbia submitted that these costs should be shared between sales and transportation classes on a volumetric basis. During oral argument, these parties stated that if the Commission did not wish to consider any modification of the four policy options under consideration, they would support policy option 3.

The City of Richmond's comments focused upon the appropriate allocation policy for Pipeline. The City urged the Commission to implement option 4 and require Pipeline to allocate costs on the same basis those costs were incurred. Such a sales deficiency approach, in the City's opinion, would be fair, provide appropriate economic signals, and create stability for future take or pay cost decisions.

While the Industrial Users' comments recommended that the Commission should permit recovery of take or pay costs in the same manner that contract demand charges were recovered through PGA clauses, they also noted that the Commission should find a way for Virginia gas utility shareholders to bear a portion of the costs associated with take or pay. The Industrial Users stated that the Commission should recognize the need for flexibility among Virginia utilities to take account of their differing circumstances.

Joint comments filed by VNG and Suffolk joined other Pipeline customers to emphasize the uniqueness of Pipeline's treatment from that of LDCs. They then urged the Commission to employ the purchase deficiency methodology used by the FERC in Order No. 500 to allocate take or pay costs among Pipeline's customers but not to use such an approach for LDCs. VNG and Suffolk stated that the cumulative deficiency methodology matched the purchase patterns that resulted in the cost allocation to Pipeline to the customers engaging in such purchasing practices. Finally, VNG and Suffolk urged the Commission to adopt policy option 3 only if:

- 1. All ceilings were eliminated on interruptible rates to enable LDCs to take full advantage of the market opportunities to recover take or pay costs;
- 2. The Commission also authorized flexible take or pay surcharges to enable LDCs to respond to the market;
- 3. The Commission allowed LDCs with a margin sharing feature to collect take or pay costs prior to any sharing of margin with firm customers; and
- 4. The fixed amortization periods were eliminated to recognize the variable nature of the price differential between gas prices and prices of competing fuels.

Services' comments observed that all four of the policy options under consideration were flawed. Of the four, Services noted that it supported policy option 3 if the amortization period was flexible to allow full recovery of take or pay costs. Services supported this approach because it believed that take or pay costs were incurred to serve all markets and customers of Services and other LDCs or provide a more market oriented industry, thereby benefitting both sales and transportation customers alike. Therefore, it believed that all of its sales and transportation customers should pay these costs.

Services criticized option 1, PGA flow through of these surcharges, as placing too much of a burden on firm sales customers. Services noted that ". . . the filed tariffs of Services [did] not break tariff rates into demand and commodity components. All costs [were] rolled into the weighted average cost of gas, making determination of contract demand charges difficult." Services' Comments at 23.

Services found policy option 2 unacceptable because it could force interruptible sales customers to transportation or completely off line as they converted to alternative fuel. It characterized policy option 4 as unworkable. Services noted that it would be nearly impossible for it to make determinations regarding customer purchase deficiencies for over 62,000 retail customers. Due to a constantly changing customer base, Services asserted that adoption of policy option 4 would leave unanswered questions such as how to treat customers who no longer have gas service, modify the

type of service they receive, or join the system as new customers.

Roanoke also submitted comments. In its comments, it urged the Commission to join Virginia LDCs in their participation in FERC proceedings involving interstate pipelines and to encourage LDCs to develop and implement initiatives for the passthrough of take or pay surcharges finally approved. In addition, Roanoke supported a variation of policy options 1 and 3.

Roanoke urged the Commission to adopt policies permitting it to amortize the recovery of take or pay costs from firm service customers over a 60 month period, together with interest, at the same rates from time to time allowed on customer deposits and refunds. Roanoke also suggested that firm customers be credited with periodic surcharge collections from interruptible sales customers during a five year amortization period under a special incremental surcharge tariff designed to recover from interruptible sales the difference between the PGA adjusted commodity sales rate and as much as the equivalent value of No. 2 fuel oil. Roanoke stated that the foregoing mechanism would permit it to recover fixed and volumetric surcharges related to take orpay liability in the same manner that contract demand charges are recovered under Roanoke's PGA. In this way, Roanoke believed it could recover a portion of its take or pay costs from industrial customers, who, in Roanoke's opinion, were primarily responsible for creating this cost burden.

In its filed comments, GE took the position that because industrials and other end users within the Commonwealth did not participate in the writing of take or pay contracts, they should not participate in the dissolving of these contracts. GE cautioned that tampering with gas prices would cause every end user with the capability to do so to start burning oil.

Finally, the Commission's staff filed comments. Its comments observed that all the players in the industry, including interstate pipelines, local utilities, and end users contributed to take or pay problems. The staff stated that efforts to assess take or pay culpability directly to any of these groups would be highly subjective and difficult to prove. The staff's comments identified various sources of take or pay costs. For example, a portion of take or pay costs are associated with buying out or down problem contracts and may be a source of prospective benefits. staff further noted that there were some historical benefits associated with the incurrence of take or pay costs. Staff Comments at 4. Staff noted that significant savings to end users resulted from spot market purchases. The staff believed that jurisdictional utilities received no direct benefit from the savings associated with spot purchases and therefore, it could not support a direct assessment of take-or-pay costs to these local utilities. Staff Comments at 6.

Staff also characterized take or pay costs as an obstacle to open access transportation and the associated competitive

benefits. Viewed in this light, take or pay costs may be considered in the nature of an access fee for nondiscriminatory transportation. Staff generally supported recovery of take or pay costs through a volumetric surcharge, provided that the policy was applied with flexibility and sensitivity to each LDC's competitive situation. Staff acknowledged that a volumetric surcharge option had certain flaws and recommended that where gas competition with alternate fuels was rendered impossible after application of the surcharge, the Commission permit recovery of these costs through an alternative mechanism.

The staff also joined many of the other commentators and recognized that alternative approaches for allocation of Pipeline's take or pay liability may be appropriate in light of Pipeline's unique characteristics. These characteristics include Pipeline's readily identifiable customer population and the significant portion of Pipeline's nongas costs attributable to take or pay costs.

# II. THE COMMISSION'S JURISDICTIONAL AUTHORITY.

As we noted in our July 6th Order for Notice and Comment, the FERC has properly recognized our authority to reallocate the fixed surcharges related to take or pay and buy out and buy down transactions in Order No. 500:

The Commission [FERC] does not believe that Nantahala precludes state regulators from designing LDC rates, or, in appropriate circumstances, from reviewing the prudence of LDCs' purchasing decisions insofar as they affect take or pay costs . . . . Therefore, the Commission believes state regulators could consider reclassifying take or pay costs billed as a fixed charge as commodity costs and incorporating such costs into LDC sales or transportation rates, or both, thereby spreading such costs to the maximum possible extent as well as subjecting them to market forces. Alternatively, state agencies may wish to consider the option of not reclassifying fixed take or pay charges and instead allocating such charges to the LDC's customers based on their cumulative purchase deficiencies.

The Commission can exercise its jurisdiction only within its legitimate sphere, which in this instance involves establishing cost allocation procedures and rates for recovery by pipelines of take or pay costs from their jurisdictional customers. The development of cost allocation procedures and rates for the LDCs are matters to be determined by state regulatory authorities. Order No. 500, III FERC Stats. & Regs., Para. 30,761 at 30,790 (Aug. 14, 1987).

FERC has properly acknowledged our authority to prescribe the design for the rates and charges of jurisdictional gas utilities. Section 1(b) of the Natural Gas Act of 1938 ("NGA"), 15 U.S.C. § 717(b) (1982), and the Hinshaw Amendment, 15 U.S.C. § 717 (c), clearly reserve this area to the regulatory authority of states. The Hinshaw Amendment

granted an exemption from federal regulatory jurisdiction to natural gas companies if both the receipt and ultimate consumption of gas occur within a single state, provided the rates, service, and facilities are subject to regulation by a state commission. A certification by a state commission to the FERC that the state is exercising such jurisdiction constitutes conclusive evidence of such regulatory power or jurisdiction. 15 U.S.C. § 717(c).

We have certified to FERC that we regulate one such pipeline Commonwealth Gas Pipeline Corporation. LDCs are gas companies operating in the local distribution of natural gas. Hence the cases cited by commentators addressing wholesale election power transactions in interstate commerce are inapposite because those cases, unlike the instant case, refer to matters directly affecting wholesale rates which are within the FERC's jurisdiction. Here, the gas companies we regulate are within our jurisdiction under the provisions of the federal law.

Our authority to design rates for our jurisdictional gas companies under the Virginia Constitution, statutes, and case law is unquestioned. As Commonwealth Gas Services, Inc. has observed in its comments at page 16:

Article IX, Section 2 of the Virginia Constitution grants to this Commission the power and charges the Commission with the duty of regulating the rates, charges and services of public utilities within the Commonwealth. Title 56 of the Code of Virginia, dealing with public service companies, and particularly Chapter 10 thereof dealing with heat, light, power, water and other utility companies generally, sets forth the power and authority of the Commission to consider and determine rates, tolls, charges and schedules of public utilities to be just and reasonable and to insure that such rates, tolls, and charges are related to aggregate actual cost incurred by the public utility in servicing its customers. Such rates also are to provide a "fair return on the public utility's rate base used to serve those jurisdictional customers.' § 56 235.2 of the Code of Virginia.

Indeed as the Virginia Supreme Court has observed:

In fixing rates within the limits of what is confiscatory to the utility on the one side, and exorbitant as against the public on the other side . . . there is a reasonably wide area within which the Commission is empowered to exercise its legislative discretion.

Norfolk v. Chesapeake and Potomac Tel. Co. of Va., 192 Va. 292,300 (1951).

#### **III. STATEMENT OF POLICY**

The Commission obviously enjoys considerable flexibility under both federal and Virginia statutes to design a mechanism for recovery of take or pay liability. Review of the comments demonstrates that all of the policy alternatives have associated problems which must be addressed.

One of the approaches under consideration was the cumulative deficiency methodology to allocate costs associated with the take or pay liabilities. We are compelled to find that the cumulative deficiency methodology should be rejected for LDCs. As virtually every LDC that participated in this proceeding has noted, such a methodology would be impossible to administer given the diversity of respective LDC customer populations.

Further, we reject the second policy alternative allocation of costs associated with the fixed surcharges to both firm and interruptible gas commodity costs. This policy could have a deleterious effect on an LDC's ability to retain interruptible customer loads. As the WGL Companies' comments have observed, any surcharge affecting the rate charged to interruptible customers would probably make that rate less attractive vis a vis other fuels. Imposing additional take orpay expenses on interruptible customers would, for example, force the WGL Companies to experience reductions in margins on their interruptible sales. Reduced margins are directly absorbed by utilities outside of a rate case. In view of the large percentage of take or pay exposure already included in FERC approved surcharges, additional charges interruptible rates will inappropriately reduce WGL and other utilities' margins. WGL Comments at 13-14.

The third methodology is, in our opinion, inappropriate because, as VNG and other commentators have noted, it too will severely constrain the relative ability of Virginia LDCs to compete with alternate fuels. To the extent that Virginia utilities must depend on industrial loads for a large percentage of their operating revenues, both the financial viability of these companies and the stability of the base gas rates charged to their firm customers may be jeopardized by the adoption of this policy alternative.

After review of this record, we are compelled to find that option 1 is the most appropriate course of action. While no one option under consideration allocates costs in a completely equitable manner, this approach has the advantages of being easy to administer and assuring complete recovery of take or pay related costs. In addition, this approach will not unduly complicate the efforts of Virginia utilities to compete with alternate fuels.

Additionally, a slightly different tack must be taken as to the division of take or pay costs for LDCs serving multiple jurisdictions, e.g., WGL. As to these companies, a cumulative deficiency approach must be used to split the Virginia jurisdictional portion of take or pay costs out of the total company costs. Once these costs have been identified, then the jurisdictional company may proceed to recover the identified jurisdictional portion of these costs through its PGA.

Finally, we find that the record supports treating Commonwealth Gas Pipeline as a unique entity. As virtually every party to this proceeding has noted, Pipeline is unique

by virtue of, among other things, its limited customer pool and the extremely high percentage of its gas costs which are take or pay related. Pipeline's limited number of customers allows a more precise measurement of the benefits associated with take or pay. Additionally, Pipeline's unique circumstances provide for a better identification of the causes of take or pay liability. Consequently we find that Pipeline should be permitted to develop a mechanism for recovery of its take or pay related costs separate and distinct from the policy established herein for LCDs. Its recovery mechanism should reflect the historic as well as the prospective benefits derived from gas purchasing practices which have increased take or pay liability. In developing this recovery mechanism, we encourage Pipeline to work actively with its customers. Should Pipeline and its customers be unable to reach agreement with regard to a recovery of the take or pay costs in an expeditious manner, this Commission will not hesitate to prescribe a recovery mechanism.

Accordingly, IT IS ORDERED that all jurisdictional gas distribution utilities may recover the fixed demand charges associated with take or pay liability and contract reformation through their purchase gas adjustment clauses. It is further Ordered that Pipeline shall forthwith file tariffs complying with the principles identified above with regard to take or pay liability. It is finally Ordered that there being nothing further to be done herein, this matter is hereby dismissed.

Lacy, COMMISSIONER, concurring in part and dissenting in part:

For the last two years Virginia natural gas companies and customers have been anticipating the flow down of costs associated with the buy out or buy down of take or pay contracts. During that time, we have examined the legality, practicality, and fairness of the available options for recovery of these costs. While no solution is ideal, all involved do agree that these costs are transitional in nature and must be resolved before the natural gas industry can realize its market potential.

The cost recovery mechanism chosen by the majority, automatic recovery through the PGA clause, while the least complex to administer, does not reflect a fair allocation of cost recovery. I believe recovering take or pay acquisition costs from a broader customer base, including sales, transportation, and interruptible customers, lessens the financial burden to any one class of customer and more accurately reflects a philosophy that responsibility for these costs cannot be assigned to any one segment of the industry. In my opinion, such a mechanism, combined with the flexibility for each local gas distribution company to justify some variant or modification to allow continued competitive operations, while administratively more complex than the PGA, represents a reasonable and more equitable resolution to this difficult but transitional situation.

I concur with the majority holding regarding take-or-pay related costs for Commonwealth Gas Pipeline.

<sup>4</sup>Regulation of Natural Gas Pipelines After Partial Well head Decontrol, Docket No. RM87 34 000, III FERC Stats. & Regs., Paragraph 30,761 (Order No. 500) (hereafter Order No. 500).

# 20VAC5-300-80. Order relating to confidential treatment of Fuel Monitoring Report FM-12. (Repealed.)

By letter dated June 28, 1990, Delmarva Power and Light Company ("Delmarva") requested that certain information which Delmarva provides in conjunction with the Commission's fuel monitoring system be kept confidential and not released to the general public. On July 18, 1990, Appalachian Power Company requested similar treatment. Information to support the preparation of "Fuel Monitoring Report 12 (FM12)—Coal and Oil Purchase Summary Report" and several other reports is filed monthly with the Commission's Division of Economics and Finance to monitor the fuel expenses incurred by electric utilities in the operation of generating facilities. The Commission initiated this proceeding when it became apparent that the fuel monitoring information of all electric utilities presented similar confidentiality issues.

Section 56 249.3 of the Code of Virginia requires certain electric utilities to file such information on fuel transactions and fuel purchases as the Commission deems necessary on a monthly basis. It is pursuant to this statute that utilities file the information to support the preparation of Report FM12 and several additional reports. Report FM12 contains a very specific breakdown of information related to the utilities' purchases of coal and oil. Section 56 249.3 of the Code of Virginia provides that the information required from utilities may include the supplier of the fossil fuel; the cost in cents per MBTU, with a notation of whether the fuel was contracted for, purchased on the spot market, or purchased from an affiliate of the electric utility; total demurrage charges incurred at each generating plant; total cost of transportation incurred at each generating plant; and the average cost of the fossil fuel in cents per MBTU's consumed at each plant with and without handling charges. Section 56-249.4 of the Code of Virginia provides that any information filed in accordance with § 56 249.3 of the Code of Virginia shall be open to the public. Although the Commission has wide discretion to determine the information to be filed under § 56 249.3, we have no discretion under § 56 249.4 to withhold some of the information from public disclosure.

Nevertheless, the Commission finds that the confidentiality concerns of the electric utilities are well founded in one respect. Under § 56 249.3 of the Code of Virginia we have heretofore required separate reporting of both the delivered price of fossil fuel and the cost of its transportation to various utility facilities. This level of detail is not necessary for the public reports prepared under § 56 249.3, in our view. In the

future, for purposes of § 56-249.3, utilities may report total delivered fossil fuel prices without separate reporting of transportation costs. For regulatory monitoring purposes, the staff may require the utilities to continue to provide detailed fossil fuel purchase information outside of the context of § 56-249.3 and under an appropriate agreement of confidentiality.

Our decision here should not be interpreted to permit utility companies to refuse disclosure to our staff of any information which staff deems necessary to accomplish its official duties. Nor should it be read as a defense to discovery by any party to a commission proceeding, subject to appropriate protective orders if necessary. Staff review and the scrutiny of other parties in fuel factor and other Commission proceedings should be sufficient to protect the public interest in reasonable utility fuel purchases. Accordingly,

#### IT IS ORDERED:

- 1. That electric utility companies filing information under § 56 249.3 of the Code of Virginia may report fuel purchase costs on the basis of total delivered prices;
- 2. That all information reported by electric utility companies pursuant to § 56 249.3 of the Code of Virginia shall continue to be made public by the Commission pursuant to § 56 249.4 of the Code of Virginia; and
- 3. That, there being nothing further to come before the Commission in this proceeding, Case Number PUE900046 shall be closed and the papers therein placed in the Commission's files for ended causes.

# 20VAC5-300-100. Standards for fuel cost projections of electric utilities. (Repealed.)

The 1989 Session of the General Assembly adopted Senate Joint Resolution No. 156 ("Resolution") requesting the State Corporation Commission to establish standards for evaluating the reasonableness of the fuel cost projections of electric utilities. The Resolution stated that "such standards need to be established in order to ensure that payments for power purchased by electric utilities from cogenerators are fair, reasonable, and appropriate." Pursuant to that Resolution, the Commission, by an order dated January 10, 1990, directed its staff to complete an investigation and submit its findings and recommendations in a report. On February 15, 1990, staff submitted its Report on the Development of Standards for Fuel Cost Projections ("Staff Report").

By Order dated March 16, 1990, the Commission directed its Division of Energy Regulation to provide notice of the proposed standards contained in the Staff Report and invited interested persons to comment and to request a hearing. Pursuant to that March 16, 1990, Order, the Commission received comments from CRSS Capital, Inc.; Chesapeake Corporation, Stone Container Corporation, and Westvaco

Corporation ("Industrial Protestants"); and Delmarva Power ("Delmarva").

Fuel cost projections have several interrelated applications and, accordingly, the accuracy of those projections is very important. First, an electric utility must make fuel cost projections to facilitate optimal resource planning. The more accurate the fuel cost projections, the better the utility can anticipate and plan for its future needs.

As emphasized in the Resolution, fuel cost projections are also essential to ensure payments for power purchased from cogenerators and small power producers are fair and reasonable. Administratively determined payments to such qualifying facilities are based upon an electric utility's avoided costs, which are necessarily calculated by projecting the utility's system costs, but for the purchases from the qualifying facilities. The assumptions underlying that calculation clearly must include fuel cost projections. Again, to ensure payments that are fair to the qualifying facility and to the ratepayer, those projections must be as accurate as possible.

Finally, fuel cost projections must be made to develop the fuel factor which an electric utility adds to its base rates for all electricity sold. Each fuel factor is designed to recover the fuel costs the utility expects to incur during the subsequent twelve months. It also includes a correction factor designed to correct any over or under recovery of prior period fuel expenses. Although the fuel factor includes a true up mechanism, it is still important for the utility to base the factor on accurate fuel cost projections to minimize extreme fluctuations or variances in customers' bills.

Staff recommends, and we agree, that standards for fuel cost projections should be broad and flexible. Such a framework will allow the standards to be readily applied to each individual utility in differing circumstances. General parameters, however, must be established.

Staff recommends the following minimum standards for fuel cost projections:

- 1. A sophisticated "state of the art" production costing model should be utilized for projecting fuel expenses.
- 2. Key input data and assumptions should reflect historic data. Any significant deviation from historic trends should be adequately explained and evaluated for reasonableness.
- 3. Key input data such as load forecasts, generating unit characteristics, fuel data, and system parameters should be developed in the same relative time frame and reflect consistent assumptions.
- 4. Demand forecasts should be current and reflect economic growth, normal weather, the price of electricity, elasticity assumptions, appliance saturations, income and population changes in the utility's service area. They

should also reflect projections of energy, peak demand and the effects of demand side options.

- 5. Expected fuel prices should reflect historic fuel costs adjusted for any known dynamics of the projection: i.e., labor contracts, expected operation of the spot market, current fuel contracts, the world fuel market, inventory levels and fuel availabilities, purchasing volumes, coal severance taxes, etc.
- 6. Unit operations should consider planned maintenance, forced outages, expected dispatch levels, historical performance levels, seasonal capabilities, as well as ongoing enhancements or unit deterioration.
- 7. Dispatch orders should reflect such variables as system economics, unit availabilities, minimum operating levels, heat rates, and terms and conditions of purchased power contracts.
- 8. Purchase power levels should consider need, system economics, power availability and transmission constraints.
- 9. Projections supporting the development of cogeneration rates should include a comparison of key input data and assumptions from the last fuel projection filed with the Commission. Major changes should be adequately explained.

# 20VAC5-317-40. Initial implementation of standby rates. (Repealed.)

On or before April 1, 2010, each utility shall submit to the State Corporation Commission (commission) a plan setting forth the utility's plan for compliance with this chapter. A utility may submit its existing standby provisions as its proposed plan for compliance with this chapter. Thereafter, following notice and an opportunity for hearing, the commission will determine whether a utility's plan complies with this chapter.

#### 20VAC5-320-120. Filing schedule. (Repealed.)

Each incumbent electric utility required to obtain commission authorization for the transfer of its transmission assets to an RTE shall file the application required by 20VAC5 320 90 with the Clerk of the Commission not later than October 16, 2000.

VA.R. Doc. No. R20-6264; Filed January 9, 2020, 5:56 p.m.

### **GOVERNOR**

#### EXECUTIVE ORDER NUMBER FORTY-SEVEN (2020)

#### Expanding Opportunities for Virginians with Disabilities

#### Importance of the Issue

The way ahead for Virginia means inclusion and opportunity for all Virginians, including individuals with disabilities. An estimated one in ten Virginians have a disability. The Americans with Disabilities Act of 1990 defines disability as any "physical or mental impairment that substantially limits one or more major life activity; [having] a record of such impairment; or being regarded as having such impairment." This definition is expansive and it is the responsibility of the Commonwealth to empower and provide supports to all Virginians with disabilities to maximize their inclusion, employment, and independence. All Virginians, including those with disabilities, have a right to enjoy the benefits of choice in society and the freedoms of everyday life.

The Commonwealth also has an obligation under the Americans with Disabilities Act, the Olmstead v. L.C. by Zimring, 527 U.S. 581 (1999) decision, and the Virginians with Disabilities Act to provide opportunities for individuals with disabilities to fully integrate into the community. This is more than an obligation—it is a necessity. Virginia must continue to prioritize the mandate of the Olmstead decision to ensure the integration of Virginians with disabilities in every community in the Commonwealth. Furthermore, it is the policy of this Commonwealth, as set forth in § 51.5-1 of the Code of Virginia, "to encourage and enable persons with disabilities to participate fully and equally in the social and economic life of the Commonwealth."

Education is a key part of expanding our qualified workforce. In the 2018 Census Bureau Current Population Survey, an estimated 22.6% of Virginians with a disability do not have a high school diploma or equivalency, compared to 13.7% of the population without a disability. Similarly, 34.9% of Virginians with a disability end their education at high school or equivalent level, compared to 21.8% without a disability, and only 22.1% of Virginians with a disability achieve a four-year degree, compared to 39.7% of Virginians without a disability.

Employment is a key component to supporting community integration and independence for individuals with disabilities. As the economy of the Commonwealth continues to grow and diversify, the need for qualified workers also increases. Unfortunately, individuals with disabilities are an underused resource to help address the need for qualified workers. Many job seekers with disabilities are unable to find full-time, competitive-wage jobs. The challenges that individuals with disabilities face based on their qualifications place limits on their earning potential. The 2017 Pew Research Center Disability Statistics Annual Report found median earnings for Virginians with disabilities ranged \$23,874-\$30,559, while

median earnings for Virginians without a disability ranged \$35,888-\$51,302. The Commonwealth administers vocational rehabilitation programs through the Department for Aging and Rehabilitative Services (DARS), the Department for the Blind and Vision Impaired (DBVI), and the Department of Veteran Services (DVS) to place workers and veterans with disabilities in public and private sector jobs. Yet, according to the 2017 Disability Status Report by Cornell University, only 41.3% of Virginians with disabilities were employed in 2016, while 81.8% of Virginians without a disability were employed during the same time period. All qualified workers in Virginia should be given the same opportunities to gain employment that utilizes their talents. This contributes to the growth of Virginia's economy and enriches our communities.

#### Establishment of the Initiative

The Commonwealth should be a leader in inclusivity for individuals with disabilities by prioritizing hiring and workforce diversity and ensuring community integration. This initiative highlights our commitment to ensuring that all Virginians have adequate supports and opportunities to thrive in the Commonwealth. Many state agencies are already doing great work to help individuals with disabilities find employment and live actively in their communities. I seek to build on these efforts by providing greater supports for both visible and invisible disabilities as individuals choose their educational path and prepare to enter the workforce. We should also ensure increased access to competitive and integrated community-based employment. I encourage local governments and the private sector to take similar steps to provide career-building and job opportunities to qualified workers and to ensure access for all individuals, no matter their ability status.

#### <u>Directi</u>ve

Therefore, by virtue of the authority vested in me as Governor under Article V of the Constitution of Virginia and under the laws of the Commonwealth, including but not limited to § 2.2-103 of the Code of Virginia, I hereby direct the Director of Diversity, Equity, and Inclusion to provide leadership and coordinate across Secretariats the following actions:

- 1. The Director of Diversity, Equity, and Inclusion shall work with the Secretary of Administration to implement § 2.2-203.2:3 of the Code of Virginia, to increase the employment of individuals within state government, including but not limited to the exploration and implementation of the following initiatives to:
- a. Use available hiring authorities, consistent with statutes, regulations, and prior executive orders;
- b. Increase efforts to accommodate individuals with disabilities within state government employment by increasing the retention and return to work of individuals with disabilities; and

- c. Expand existing efforts for the recruitment, accommodation, retention, and advancement of individuals with disabilities for positions available in state government.
- 2. The Secretary of Education and Chief Workforce Advisor, in coordination with the State Council of Higher Education for Virginia (SCHEV) shall identify opportunities and current best practices at institutions of higher education, community colleges, and vocational training programs to increase the number of Virginians with disabilities who are able to participate actively in advanced training and education programs they choose.
- 3. The Chief Workforce Advisor, in conjunction with the Secretaries of Commerce and Trade and Education, shall work with the Secretary of Health and Human Resources, who will direct DARS, and DBVI, and the Department for the Deaf and Hard of Hearing to strengthen and develop workforce pipelines for individuals with disabilities and promote the hiring of qualified individuals with disabilities by new and existing Virginia businesses as well as companies seeking to locate to the Commonwealth.
- 4. The Secretary of Veterans and Defense Affairs and the Secretary of Health and Human Resources will ensure that there is continued collaboration between DVS and DARS to serve disabled veterans. The Secretary of Veterans and Defense Affairs and DVS will also work with employers certified through the Virginia Values Veterans initiative to increase efforts to hire and place in jobs veterans with disabilities.
- 5. The Virginia Information Technology Agency shall work with other state agencies to improve the accessibility of the Commonwealth's websites for Virginians with disabilities and encourage similar efforts in the private sector.
- 6. The Director of Diversity, Equity, and Inclusion shall convene, at least annually, a stakeholder meeting to advise and provide input on the directives of this Executive Order and the Commonwealth's efforts towards accessibility, inclusion, and community integration for individuals with disabilities.

#### Reporting on Progress of the Initiative

The Director of Diversity, Equity, and Inclusion shall report to the Governor on the progress of this Order and the steps taken to ensure community integration, improve website accessibility, and advance employment of Virginians with disabilities.

#### Effective Date of the Executive Order

This Executive Order rescinds and replaces Executive Order No. 46 (2015) issued by Governor McAuliffe. This Executive Order shall be effective upon its signing and shall remain in full force and effect until amended or rescinded by further executive order.

Given under my hand and under the Seal of the Commonwealth of Virginia this 2nd day of January, 2020.

/s/ Ralph S. Northam Governor

 $^{1}\mathrm{Erickson},$  W., Lee, C., & von Schrader, S. (2018). 2016 Disability Status Report:

Virginia. Ithaca, NY: Cornell University Yang-Tan Institute on Employment and Disability (YTI).

<sup>2</sup>42 U.S.C. § 12102 (1).

#### EXECUTIVE ORDER NUMBER FORTY-EIGHT (2020)

# Establishment of the Virginia Data Commission, The Virginia Executive Data Board, and The Virginia Data Governance Council

#### Importance of the Initiative

Chapter 679 of the 2018 Acts of Assembly established the Chief Data Officer of the Commonwealth (Chief Data Officer) and the Data Sharing and Analytics Advisory Committee (Advisory Committee). Both were charged with the development of a permanent data sharing and analytics governance structure for the Commonwealth. The Advisory Committee's "Data Sharing and Analytics Governance Structure for the Commonwealth of Virginia Report" recommends establishing a Virginia Data Commission, Executive Data Board, Data Governance Council, and Data Stewards Group to accomplish the following objectives:

- Promote and facilitate, subject to all applicable federal and state laws, rules, and regulations, the secure and appropriate sharing and use of data assets of the Commonwealth in support of data-drive policymaking, research, analysis, study, and economic development;
- Maximize the value and utility of Commonwealth data related investments and assets;
- Promote increased data sharing between state agencies and localities providing tangible operational improvements assisting state agencies and localities in fulfilling their missions in a more coordinated, cost-efficient manner;
- Leverage government data, using appropriate security and privacy standards, supporting evidenced-based policymaking addressing high priority public policy issues; and
- Provide for public access to certain data assets, where lawful and appropriate, enhancing research, innovation, and insight.

Through this Executive Order, I call on leaders across state government to review current state goals, performance objectives, and outcome measures and recommend solutions that will make Virginia a national leader in data-driven policy, evidence-based decision-making, and outcome-based performance management.

### Governor

#### Establishment of the Commission

Accordingly, by virtue of the authority vested in me as Governor under Article V of the Constitution of Virginia and §§ 2.2-134 and 2.2-135 of the Code of Virginia, and subject to my continuing and ultimate authority and responsibility to act in such matters, I hereby establish the Commonwealth of Virginia Data Commission (Commission). The Commission will play a critical role in Virginia's data governance framework by assisting the Chief Data Officer of the Commonwealth to set, plan, and prioritize data sharing performance goals for the Commonwealth, review agency accomplishments, and achieve desired performance goals and objectives.

#### Composition of the Commission

The Commission shall be chaired by the Chief Data Officer. Membership shall include the following individuals or their designees:

- The Auditor of Public Accounts;
- The Chief Workforce Advisor to the Governor;
- Secretary of Administration;
- Secretary of Health and Human Resources;
- Secretary of Public Safety and Homeland Security;
- Secretary of Finance;
- Secretary of the Commonwealth;
- Secretary of Agriculture and Forestry;
- Secretary of Natural Resources;
- Secretary of Commerce and Trade;
- Secretary of Education;
- Secretary of Defense and Veterans Affairs;
- · Secretary of Transportation; and
- Seven non-legislative citizen members to be appointed by the Governor each representing one of seven geographic regions within the state.

The non-legislative citizen members shall be residents of the Commonwealth of Virginia. The chair may invite other members of state government to participate in Commission meetings as he deems necessary.

#### Responsibilities of the Commission

The Commission's responsibilities shall include the following:

• Study, report and make recommendations to the Governor on all areas of data governance, quality, sharing, analytics, reporting, intelligence, and performance management;

- Advise and assist the Chief Data Officer to set, plan, prioritize, and review data and outcome performance goals and objectives to improve operational efficiency, increase delivery of customer-centered services, and promote better outcomes for constituents;
- Make recommendations to the Governor on performance goals and objectives requiring engagement from organizations across state government; and
- Cooperate with local governments and governmental agencies.

#### Establishment of the Board

The Chief Data Officer shall have the authority to convene the Executive Data Board (Board).

#### Composition of the Board

The Chief Data Officer shall chair the Board and select its membership. The Board, however, shall consist of executive leadership, or their designees, from executive branch agencies engaged in data sharing and analytics projects.

#### Responsibilities of the Board

The Board shall:

- Translate the Commonwealth's data-driven policy goals and objectives to agency performance targets;
- Allocate appropriate agency resources to support data governance, sharing, and analytics initiatives; and
- Provide to the Commission any reports on the Board's recommendations and work as required by the Commission.

#### Establishment of the Council

The Chief Data Officer shall chair the Data Governance Council (Council).

#### Composition of the Council

The Board shall select the members of the Council. The Council, however, shall consist of employees of the state agencies represented on the Board.

#### Responsibilities of the Council

The Council shall:

- Liaise between state agency operations and the Chief Data Officer;
- Advise the Chief Data Officer on technology, policy, and governance strategies;
- Administer data governance policies, standards, and best practices as set by the Board;
- Implement data sharing and analytics projects;
- · Review open data assets; and

• Provide to the Board any reports on the Council's recommendations and work as required by the Board.

#### Support of the Commission, Board, and Council

Staff support for the work of the Commission, Board, and Council shall be provided by the Office of the Governor and the Office of the Secretary of Administration. An estimated 500 hours of staff time will be required to support this work.

The Commission shall commence its work promptly and suggest legislative and budgetary proposals that will enable the implementation of any identified recommendations. The Commission shall provide an annual report to the Governor no later than December 1st of each year. The Commission shall issue such other reports and recommendations as necessary or as requested by the Governor.

#### Effective Date of the Executive Order

This Executive Order shall be effective upon signing and shall remain in force and effect for one year, unless amended or rescinded by further executive order.

Given under my hand and under the Seal of the Commonwealth of Virginia this 7th day of January, 2020.

/s/ Ralph S. Northam Governor

#### EXECUTIVE ORDER NUMBER FORTY-NINE (2020)

# Declaration of a State of Emergency Due to Potential Civil Unrest at the Virginia State Capitol

#### Importance of the Issue

The Commonwealth of Virginia is a welcoming state. Virginians understand that diversity of opinion keeps our democracy strong. The more voices involved in our political dialogue, the stronger we are. Civil discourse, even and especially, amongst those who disagree, is critical to our democracy's evolution and success. When the civility of that political discourse breaks down, the Commonwealth suffers. Three years ago, Virginia and the nation, watched horrified as civil protest was marred by violence and hate. The events that occurred in Charlottesville, Virginia demonstrated what can happen when peaceful demonstrations are hijacked by those who come into the Commonwealth and do not value the importance of peaceful assembly. We lost three Virginians. We must take all precautions to prevent that from ever happening again.

Credible intelligence gathered by Virginia's law enforcement agencies indicates that tens of thousands of advocates plan to converge on Capitol Square for events culminating on January 20, 2020. Available information suggests that a substantial number of these demonstrators are expected to come from outside the Commonwealth, may be armed, and have as their purpose not peaceful assembly but violence,

rioting, and insurrection. Assuring that Virginia's Capitol Square and surrounding public areas are sheltered safe places for those who come to participate in the democratic process, as well as those who work on or near Capitol Square, is my greatest priority.

The anticipated effects of the potential convergence of tens of thousands of demonstrators on Capitol Square, some of whom may not come to assemble peacefully, constitutes an emergency as described in § 44-146.16 of the Code of Virginia (Code). Therefore, by virtue of the authority vested in me by the Constitution of Virginia, by §§ 2.2-103 and 44-146.13 et seq. of the Code, as Governor and Director of Emergency Management and Commander-in-Chief of the Commonwealth's armed forces, I proclaim that a state of emergency will exist starting on January 17, 2020 through January 21, 2020. Accordingly, I direct state and local governments to render appropriate assistance to prepare for this event, to alleviate any conditions resulting from the situation, and to implement recovery and mitigation operations and activities so as to return impacted areas to preevent conditions as much as possible. Emergency services shall be conducted in accordance with § 44-146.13 et seq. of the Code.

In order to marshal all public resources and appropriate preparedness, response, and recovery measures, I order the following actions:

A. Activation of the Virginia Emergency Operations Center and the Virginia Emergency Support Team, as directed by the State Coordinator of Emergency Management, to coordinate the provision of assistance to state and local governments and to facilitate emergency services assignments to other agencies.

- B. Authorization for the heads of executive branch agencies, on behalf of their regulatory boards as appropriate, and with the concurrence of their Cabinet Secretary, to waive any state requirement or regulation, and enter into contracts without regard to normal procedures or formalities, and without regard to application or permit fees or royalties. All waivers issued by agencies shall be posted on their websites.
- C. To provide for the shelter and safety of state employees who work on or near the Virginia State Capitol and those who come to peacefully assemble, and consistent with the General Assembly's prohibition on weapons in the Virginia State Capitol and the Pocahontas Buildings, and Executive Order 50 (McAuliffe), which prohibits firearms in offices occupied by executive branch agencies, no weapons, including firearms, may be carried or possessed on any land, real property, or improvements owned by the Commonwealth of Virginia within the area bounded by Broad Street, Ninth Street, Bank Street and Governor Street in the City of Richmond, Virginia, as well as any Commonwealth-owned parking lots for Virginia's Department of Transportation, the Madison Building, the Monroe Building, the Patrick Henry

### Governor

Building, Washington Building, the Jefferson Building, and the Oliver Hill Building.

- 1. "Firearm" means any handgun, pistol, revolver, or other weapon designed or intended to propel or expel a projectile or missile of any kind by action of an explosion of any combustible material; rifle, shotgun, automatic or semi-automatic gun; assault firearm as defined in § 18.2-308.2:2 of the Code; machine gun; 3D printed gun; or similar weapon. Firearm does not include any ceremonial firearm currently on display in a legislative branch agency.
- 2. "Weapon" means any weapon as defined in paragraphs (ii) through (v) of subsection A of § 18.2-308 of the Code and any stun weapon, as defined under § 18.2-308.1 of the Code, with the exception of a pocket knife having a folding metal blade of less than three inches. "Weapons" also includes, but is not limited to, sticks, torches, poles, bats, shields, helmets, caustic substances (i.e., pepper spray), hazardous materials, scissors, razor blades, needles, toy guns, toy weapons, fireworks, glass bottles, laser pointers, aerosol containers, baseballs, softballs, UAVs/Drones, or any item that can inflict bodily harm that is visible, other than firearms.
- 3. The prohibition with respect to weapons (other than firearms) shall not apply to (a) any person possessing a knife customarily used for food preparation or service and using it for such purpose, (b) any person who possesses a knife or blade that he uses customarily in his trade and using it in such trade, (c) any tool used by a person customarily in his trade and being used pursuant to a contract with a legislative branch agency, or (d) any tool used by a state employee as a condition of his position and being used in the scope of employment. The prohibition with respect to weapons (other than firearms) shall not apply to any ceremonial weapon currently on display or use in a legislative branch agency.
- 4. This prohibition applies to both the open and the concealed carry of firearms and other weapons.
- D. Exempt from paragraph C's prohibition are:
  - 1. All on-duty sworn law enforcement personnel providing security for the areas listed in paragraph C during this emergency, as determined by the Chief of the Division of Capitol Police; and
  - 2. Any other person otherwise acting in coordination with the Division of Capitol Police, as determined by its chief.

#### Effective Dates of this Executive Order

This Executive Order shall be effective from 5:00 p.m., Friday, January 17, until 5:00 p.m., Tuesday, January 21, 2020. Capitol Square will be open from 7:00 a.m. to 5:00 p.m. on the above days. Nothing in this Order rescinds or amends Executive Order 50 (McAuliffe), which remains in full force and effect.

Given under my hand and under the Seal of the Commonwealth of Virginia, this 15th day of January, 2020.

/s/ Ralph S. Northam Governor

### **GUIDANCE DOCUMENTS**

#### **PUBLIC COMMENT OPPORTUNITY**

Pursuant to § 2.2-4002.1 of the Code of Virginia, a certified guidance document is subject to a 30-day public comment period after publication in the Virginia Register of Regulations and prior to the guidance document's effective date. During the public comment period, comments may be made through the Virginia Regulatory Town Hall website (http://www.townhall.virginia.gov) or sent to the agency contact. Under subsection C of § 2.2-4002.1, the effective date of the guidance document may be delayed for an additional period. The guidance document may also be withdrawn.

The following guidance documents have been submitted for publication by the listed agencies for a public comment period. Online users of this issue of the Virginia Register of Regulations may click on the name of a guidance document to access it. Guidance documents are also available on the Virginia Regulatory Town Hall (http://www.townhall.virginia.gov) or from the agency contact or may be viewed at the Office of the Registrar of Regulations, 900 East Main Street, Richmond, Virginia 23219.

#### **BOARD OF ACCOUNTANCY**

<u>Title of Document:</u> VBOA Policy #9: Inactive Status Procedure for Approval/Denial/Appeal.

Public Comment Deadline: March 4, 2020.

Effective Date: March 5, 2020.

Agency Contact: Nancy Glynn, Executive Director, Board of Accountancy, 9960 Mayland Drive, Suite 402, Richmond, VA 23233, telephone (804) 367-8540, or email nancy.glynn@boa.virginia.gov.

#### **AUDITOR OF PUBLIC ACCOUNTS**

<u>Title of Document:</u> Specifications for Audits of Counties, Cities, and Towns.

Public Comment Deadline: March 4, 2020.

Effective Date: July 1, 2020.

Agency Contact: Carnell Bagley, Regulatory Coordinator, Auditor of Public Accounts, James Monroe Building, 101 North 14th Street, 8th Floor, Richmond, VA 23219, telephone (804) 225-3350, or email carnell.bagley@apa.virginia.gov.

# STATE BOARD OF BEHAVIORAL HEALTH AND DEVELOPMENTAL SERVICES

<u>Title of Document:</u> Certified Recovery Residences Guidance Document (ORS-01).

Public Comment Deadline: March 4, 2020.

Effective Date: March 7, 2020.

Agency Contact: Ruth Anne Walker, Director of Regulatory Affairs, Department of Behavioral Health and Developmental Services, Jefferson Building, 1220 Bank Street, 4th Floor, Richmond, VA 23219, telephone (804) 225-2252, or email ruthanne.walker@dbhds.virginia.gov.

#### STATE BOARD OF EDUCATION

<u>Title of Document:</u> Guidelines for the Operation of Electronic Room Partitions.

Public Comment Deadline: March 4, 2020.

Effective Date: March 5, 2020.

Agency Contact: A.K. (Vijay) Ramnarain, Director, Office of Support Services, Department of Education, 101 North 14th Street, Richmond, VA 23219, telephone 225-2037, or email vijay.ramnarain@doe.virginia.gov.

# DEPARTMENT OF MEDICAL ASSISTANCE SERVICES

<u>Title of Document:</u> SUPPORT Act Established Medicare Part B Benefit for Opioid Use Disorder Treatment Services by Opioid Treatment Programs, Effective January 1, 2020.

Public Comment Deadline: March 4, 2020.

Effective Date: March 5, 2020.

Agency Contact: Emily McClellan, Policy and Research, Department of Medical Assistance Services, 600 East Broad Street, Suite 1300, Richmond, VA 23219, telephone (804) 371-6043, or email emily.mcclellan@dmas.virginia.gov.

#### STATE WATER CONTROL BOARD

<u>Title of Document:</u> Addendum to Trading Nutrient Reductions from Nonpoint Source Best Management Practices in the Chesapeake Bay Watershed: Guidance for Agricultural Landowners and Your Potential Trading Partners.

Public Comment Deadline: March 4, 2020.

Effective Date: March 5, 2020.

Agency Contact: Sara Felker, Nonpoint Source Trading Coordinator, Department of Environmental Quality, 1111 East Main Street, Suite 1400, P.O. Box 1105, Richmond, VA 23218, telephone (804) 698-4203, or email sara.felker@deq.virginia.gov.

### **GENERAL NOTICES/ERRATA**

#### STATE AIR POLLUTION CONTROL BOARD

#### **Proposed State Implementation Plan Revision**

Purpose of notice: The Department of Environmental Quality (DEQ) is seeking comments and announcing a public comment period on a proposed permit to limit air pollution emitted by a facility in Roanoke, Virginia. This public comment period is being held in order to satisfy state public notice requirements under § 10.1-1322.01 of the Code of Virginia. If adopted, the Commonwealth also intends to submit the plan as a revision to the Commonwealth of Virginia State Implementation Plan (SIP) in accordance with the requirements of § 110(a) of the federal Clean Air Act. The SIP is the plan developed by the Commonwealth in order to fulfill its responsibilities under the federal Clean Air Act to attain and maintain the ambient air quality standards promulgated by the U.S. Environmental Protection Agency (EPA) under the Act.

Public comment period: January 31, 2020, to March 17, 2020.

Public hearing: A public hearing will be conducted if a request is made in writing to the listed contact. In order to be considered, the request must include the full name, address, and telephone number of the person requesting the hearing and be received by DEQ by the last day of the comment period. Notice of the date, time, and location of any requested public hearing will be announced in a separate notice, and another 30-day comment period will be conducted.

Permit name: State Operating Permit issued by DEQ, under the authority of the State Air Pollution Control Board.

Name, address, and registration number: Roanoke Electric Steel Corporation d/b/a Steel Dynamics, Roanoke Bar Division, 102 Westside Boulevard, Roanoke, Virginia, Registration No. 20131.

Description of proposal: The Roanoke Electric Steel Corporation Steel Mini-Mill in Roanoke, Virginia was identified as a source subject to reasonably available control technology (RACT) for the control of NO<sub>X</sub>. The permit and RACT determination were submitted to EPA as a SIP revision on January 31, 2005. EPA approved the submittal on April 27, 2005 (70 FR 21621). Since that approval, the company has made changes to its operations that necessitate the issuance of a new state operating permit. Billet Reheat Furnace #2 was to replace Billet Reheat Furnace #1 but was never constructed. Electric Arc Furnace #4 has been removed, Ladles Preheaters EU-3 and Tundish Preheaters EU-4 have been removed and replaced with other preheaters, and Billet Reheat Furnace #1 has been permanently shut down and replaced with a new billet reheat furnace. The baseline RACT determination for Electric Arc Furnace #5 and the associated Ladle Metallurgical Station #5 has not changed.

Federal information: This notice is being given to satisfy the public participation requirements of federal regulations

(40 CFR 51.102). The proposal will be submitted as a revision to the Commonwealth of Virginia SIP under § 110(a) of the federal Clean Air Act in accordance with 40 CFR 51.104.

How to comment: DEQ accepts written comments by email, fax, and postal mail. In order to be considered, written comments must include the full name, address, and telephone number of the person commenting and be received by DEQ by the last day of the comment period. All materials received are part of the public record.

To review proposal: The proposal and any supporting documents are available on the DEQ Air Public Notices for Plans website at <a href="http://www.deq.virginia.gov/Programs/Air/PublicNotices/airplansandprograms.aspx">http://www.deq.virginia.gov/Programs/Air/PublicNotices/airplansandprograms.aspx</a>. The documents may also be obtained by contacting the listed DEQ representative. The public may review the documents between 8:30 a.m. and 4:30 p.m. of each business day until the close of the public comment period at the following DEQ locations:

- (1) Main Street Office, 22nd Floor, 1111 East Main Street, Richmond, VA, telephone (804) 698-4249; and
- (2) Blue Ridge Regional Office, 901 Russell Drive, Salem, VA, telephone (540) 562-6700.

<u>Contact Information:</u> Paul Jenkins, Department of Environmental Quality, 901 Russell Drive, Salem, VA 24153, telephone (540) 562-6822, FAX (540) 562-6725, or email paul.jenkins@deq.virginia.gov.

# STATE BOARD OF BEHAVIORAL HEALTH AND DEVELOPMENTAL SERVICES

State Human Rights Commmittee Decision on Proposed Variances to the Regulations to Assure the Rights of Individuals Receiving Services from Providers Licensed, Funded, or Operated by the Department of Behavioral Health and Developmental Services

Notice of action: The Department of Behavioral Health and Developmental Services (DBHDS), in accordance with Part VI, Variances (12VAC35-115-220 et seq.), of the Regulations to Assure the Rights of Individuals Receiving Services from Providers Licensed, Funded, or Operated by the Department of Behavioral Health and Developmental Services (12VAC35-115), hereafter referred to as the "Human Rights Regulations," is announcing a decision by the State Human Rights Committee (SHRC) on an application for proposed variances to the Human Rights Regulations submitted to the SHRC. The purpose of the regulations is to ensure and protect the legal and human rights of individuals receiving services in facilities or programs operated, licensed, or funded by DBHDS.

Each variance references the specific part of these regulations to which a variance is needed, the proposed wording of the

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substitute rule or procedure, and the justification for a variance. Such variance also describes time limits and other conditions for duration and the circumstances that will end the applicability of the variance. All variances are approved for a specific time period. The variances must comply with the general requirements of Part VI, Variances (12VAC35-115-220 et seq.), of the Human Rights Regulations.

Purpose of notice: Following publication of the request for these variances in the Virginia Register of Regulations on September 16, 2019, a public comment period was held from September 16, 2019, through October 16, 2019. One comment was received. After considering all available information, at its meeting on November 21, 2019, the SHRC voted to approve the application for proposed new variances to the Human Rights Regulations for DBHDS Central State Hospital (CSH). The variances were approved for a three-year period with annual updates to the SHRC and quarterly updates to the local human rights committee (LHRC).

#### I. Variance is approved to the following sections:

12VAC35-115-150: General Provisions

12VAC35-115-175: Human Rights Complaint Process

12VAC35-115-180: Local Human Rights Committee Hearing and Review Procedures

12VAC35-115-190: Special Procedures for Emergency Hearings by the LHRC

12VAC35-115-200: Special Procedures for LHRC Reviews Involving Consent and Authorization

12VAC35-115-210: State Human Rights Committee Appeals Procedures

Explanation: These CSH variances allow alternative procedures for addressing complaints by individuals in maximum security when the individual is not satisfied with the director's response so that the individual may appeal to the CSH Maximum Security Appeals Committee.

#### II. Variance is approved to the following section:

12VAC35-115-100, Restrictions on Freedoms of Everyday Life, subdivision A 1 c, "freedom to have and spend personal money."

Explanation: Individuals who are receiving hospitalization under the civil admissions process in the maximum security perimeter may not keep any form of money on their person. The CSH variance to this regulation allows nonforensic patients to purchase items in a canteen and from external providers; however, individuals may not have money on their person.

#### III. Variance is approved to the following sections:

12VAC35-115-20, Policy, subdivision A 2, "Each individual who receives services shall be assured respect for basic human dignity."

12VAC35-115-50, Dignity, subdivision C 3 a, "each individual has the right to ... reasonable privacy...."

Explanation: CSH cannot fulfill its duty to provide a safe environment for individuals who are high-risk in a secure forensic program through less intrusive means than routine "pat downs" of fully clothed individuals and proactive searches of individual bedroom areas. The CSH variance to these regulations allows for routine pat downs of nonforensic individuals before and after group movement: within a secure perimeter; anytime an individual leaves the secure perimeter; and any time an individual has physical access to a visitor who is not an employee of CSH and allows proactive routine searches of individual bedrooms to identify contraband or breaches of safety and security.

#### IV. Variance is approved to the following section:

12VAC35-115-50, Dignity:

subdivision C 6, "each individual has the right to... communicate privately with any person by mail and have help in writing and reading mail, as needed."

subdivision C 6 a, "An individual's access to mail may be limited only if the provider has reasonable cause to believe that the mail contains illegal material or anything dangerous. If so, the director or his designee may open the mail, but not read it, in the presence of the individual."

subdivision C 7, "each individual has the right to... communicate privately with any person by telephone and have help in doing so."

subdivision C 7 a, "An individual's access to the telephone may be limited only if, in the judgment of a licensed professional, communication with another person will result in demonstrable harm to the individual or significantly affect his treatment."

Explanation: The CSH variance to these regulations allows for staff to open but not read mail and packages in the presence of the individual in the maximum security program. The CSH variance also restricts individuals in the maximum security forensic program from communicating with each other by mail or telephone.

Contact Information: Deborah Lochart, Director, Office of Human Rights, Department of Behavioral Health and Developmental Services, Jefferson Building, 1220 East Bank Street, P.O. Box 1797, Richmond, VA 23218-1797, telephone (804) 786-0032, FAX (804) 804-371-2308, or email deb.lochart@dbhds.virginia.gov.

### General Notices/Errata

#### **DEPARTMENT OF ENVIRONMENTAL QUALITY**

# Citizen Nomination of State Surface Waters for Inclusion in Virginia Department Of Environmental Quality's Annual Water Quality Monitoring Plan

In accordance with § 62.1-44.19:5 F of the Code of Virginia, Water Quality Monitoring Information and Restoration Act, any person may request that a specific body of water be included in the Department of Environmental Quality's (DEQ's) annual water quality monitoring plan. Such requests shall include at a minimum (i) a geographical description of the water body recommended for monitoring, (ii) the reason the monitoring is requested, and (iii) any water quality data that the petitioner may have collected or compiled. Each request received by April 30 shall be reviewed when DEQ develops the annual water quality monitoring plan for the following calendar year. DEQ will respond in writing on its approval or denial of each nomination by August 31.

Please see the nominating form included as Attachment 1 (also available at <a href="https://www.deq.virginia.gov/Programs/Water/WaterQualityInformationTMDLs/WaterQualityMonitoring/CitizenMonitoring.aspx">https://www.deq.virginia.gov/Programs/Water/WaterQualityInformationTMDLs/WaterQualityMonitoring/CitizenMonitoring.aspx</a>). Use of the nomination form is preferred; however, all nominations with the minimum of information as outlined in this notice will be accepted for review.

Please note that the monitoring program covered by this process is directed at the surface waters of the state. Private ponds, privately owned lakes, and any other body of water not deemed to be "State Waters" are ineligible.

Nominations can be submitted to the contact listed in this notice by mail or email or hand delivered to the receptionist's desk at DEQ Central Office, 1111 East Main Street, Suite 1400, Richmond, Virginia.

ATTACHMENT 1: REQUEST TO INCLUDE A WAT	TER SEGMENT IN DEQ'S ANNUAL MON	ITORING PLAN
Name:		Date:
Mailing Address:		
	Street	
City:	State:	Zip:
E-mail address:		
Home telephone:	Business telephone:	
Geographic description of the water body:		
(1) Name of the water body or segment proposed for m	onitoring:	
(2) Description of the upstream and downstream be (preferably a photocopy of a 7.5 minute quad USGS to		
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### General Notices/Errata

	(3) Reason for requesting that this water body be monitored:
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(4) Attach any water quality data that you have collected or compiled. Include the name of the organization/entity that generated the data.

Please Mail/FedEx/Email the requested information/form to the contact listed.

Mail to: Stuart Torbeck

Department of Environmental Quality

P.O. Box 1105, Suite 1400 Richmond, VA 23218

Email: charles.torbeck@deq.virginia.gov

FedEx to: Stuart Torbeck

Department of Environmental Quality

1111 East Main Street Richmond, VA 23219

<u>Contact Information:</u> Stuart Torbeck, Department of Environmental Quality, P.O. Box 1105, Richmond, VA 23218, telephone (804) 698-4461, FAX (804) 698-4032, or email charles.torbeck@deq.virginia.gov.

#### Virginia Electric and Power Company Rochambeau Notice of Intent for Small Renewable Energy Project (Solar) - James City County

Virginia Electric and Power Company d/b/a Dominion Energy has provided the Department of Environmental Quality a notice of intent to submit the necessary documentation for a permit by rule for a small renewable energy project (solar) in James City County. The project is an approximately 19.9-megawatt alternating current solar project located to the east of Richmond Road (Highway 60) and to the west of Rochambeau Drive in James City County. The project will be constructed on a single parcel of land of approximately 192 acres and will use photovoltaic solar modules and a single-axis tracking system to deliver up to 19.9 megawatts of electricity (alternating current) to an existing transmission line. The preliminary design of the project calls for the project to use approximately 62,964 solar panels. The project is located at latitude 37.359, longitude -76.755.

Contact Information: Mary E. Major, Department of Environmental Quality, 1111 East Main Street, Suite 1400, P.O. Box 1105, Richmond, VA 23218, telephone (804) 698-4423, FAX (804) 698-4510, or email mary.major@deq.virginia.gov.

# DEPARTMENT OF MEDICAL ASSISTANCE SERVICES

# Draft Physician/Practitioner Provider Manual (Appendix D) for Stakeholder Input

Comment period: January 8, 2020, through February 7, 2020.

The draft Appendix D of the Physician/Practitioner Manual is now available on the Department of Medical Assistance Services website at <a href="http://www.dmas.virginia.gov/#/manualdraft">http://www.dmas.virginia.gov/#/manualdraft</a> for public comment until February 7, 2020.

Please refer to pages 11 and 12 of the draft Physician/Practitioner Manual for more details.

Contact Information: Emily McClellan, Regulatory Manager, Division of Policy and Research, Department of Medical Assistance Services, 600 East Broad Street, Suite 1300, Richmond, VA 23219, telephone (804) 371-4300, FAX (804) 786-1680, TDD (800) 343-0634, or email emily.mcclellan@dmas.virginia.gov.

#### STATE WATER CONTROL BOARD

# Proposed Consent Special Order for the Estate of Isaac King Sr.

An enforcement action has been proposed for the Estate of Isaac King Sr. for violations at the IH King Grocery, 13759 Newtown Road, Newtown, Virginia. The State Water Control Board proposes to issue a special order by consent to the Estate of Isaac King to address noncompliance with the State

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Water Control Law and regulations. A description of the proposed action is available at the Department of Environmental Quality office listed or online at www.deq.virginia.gov. Carla Pool will accept comments by email at carla.pool@deq.virginia.gov, FAX at (804) 698-4234, or postal mail at Department of Environmental Quality, Central Office, P.O. Box 1105, Richmond, VA 23218, from February 3, 2020, to March 4, 2020.

#### **Proposed Enforcement Action for Sreevidya LLC**

An enforcement action has been proposed for Sreevidya LLC for violations of the State Water Control Law at 253 Fincastle Turnpike, Tazewell, Virginia. A description of the proposed action is available at the Department of Environmental Quality office listed or online at <a href="https://www.deq.virginia.gov">www.deq.virginia.gov</a>. Ralph T. Hilt will accept comments by email at <a href="mailto:ralph.hilt@deq.virginia.gov">ralph.hilt@deq.virginia.gov</a>, FAX at (276) 676-4899, or postal mail at Department of Environmental Quality, Southwest Regional Office, 355-A Deadmore Street, Abingdon, VA 24210, from February 4, 2020, through March 4, 2020.

#### Proposed Consent Order for Sunshine Enterprise Inc.

An enforcement action has been proposed for Sunshine Enterprise Inc. for violations at the Foodway Supermarket, Bentonville, Virginia. The State Water Control Board proposes to issue a consent order with penalty to Sunshine Enterprise Inc. to address noncompliance with State Water Control Law. A description of the proposed action is available at the Department of Environmental Quality office listed or online at <a href="https://www.deq.virginia.gov">www.deq.virginia.gov</a>. Tiffany Severs will accept comments by email at <a href="mailto:tiffany.severs@deq.virginia.gov">tiffany.severs@deq.virginia.gov</a>, FAX at (540) 574-7878, or postal mail at Department of Environmental Quality, Valley Regional Office, 4411 Early Road, P.O. Box 3000, Harrisonburg, VA 22801, from February 3, 2020, to March 4, 2020.

#### **VIRGINIA CODE COMMISSION**

#### **Notice to State Agencies**

**Contact Information:** *Mailing Address:* Virginia Code Commission, Pocahontas Building, 900 East Main Street, 8th Floor, Richmond, VA 23219; *Telephone:* (804) 698-1810; *Email:* varegs@dls.virginia.gov.

**Meeting Notices:** Section 2.2-3707 C of the Code of Virginia requires state agencies to post meeting notices on their websites and on the Commonwealth Calendar at https://commonwealthcalendar.virginia.gov.

Cumulative Table of Virginia Administrative Code Sections Adopted, Amended, or Repealed: A table listing regulation sections that have been amended, added, or repealed in the *Virginia Register of Regulations* since the regulations were originally published or last supplemented in the print version of the Virginia Administrative Code is available at <a href="http://register.dls.virginia.gov/documents/cumultab.pdf">http://register.dls.virginia.gov/documents/cumultab.pdf</a>.

Filing Material for Publication in the Virginia Register of Regulations: Agencies use the Regulation Information System (RIS) to file regulations and related items for publication in the Virginia Register of Regulations. The Registrar's office works closely with the Department of Planning and Budget (DPB) to coordinate the system with the Virginia Regulatory Town Hall. RIS and Town Hall complement and enhance one another by sharing pertinent regulatory information.

#### **ERRATA**

#### **DEPARTMENT OF GENERAL SERVICES**

<u>Titles of Regulations:</u> **1VAC30-45, Certification of Noncommercial Environmental Laboratories.** 

1VAC30-46, Accreditation for Commercial Environmental Laboratories.

Publication: 36:11 VA.R. 1243 January 20, 2020.

Correction to Notice of Intended Regulatory Action:

Page 1243, second paragraph, after "agency" replace "intends" with "does not intend"

VA.R. Doc. No. R20-6196; Filed January 21, 2020