

AGENDA

DHCD WORKGROUP #2

IBC, IFC, IEBC, IECC, ICC pool code, SFPC technical issues, legislative issues, FSBC technical code changes

November 8, 2012

9:30 to 3:30

PLEASE NOTE LOCATION: HANOVER COUNTY GOVERNMENT OFFICES

See email for directions

Meeting Agenda:

1. Finalize HJR 648 code changes for consensus approval or non-consensus. The summary of an October 4th conference call is attached (**Page 4**). USBC Section 1109.16 carpet pad: this change will go forward to the forward BHCD's CSC on March 25, 2013 as non-consensus. There has been much discussion on eliminating the ¼" part of the change. (**Page 8**). USBC T 1106.1: the original code change (**Page 9**) will move forward as non consensus and an alternate code change is being developed to increase accessible parking spaces at 151 or greater. USBC Section new 1106.3 deny with new code change to amend. Restaurants deleted if pass increase parking 151 or greater in T1106.1. Physicians and dentist delete by adding "Hospital Outpatient Clinics" (**Page 10**). Would increase from T1106.1 to 10% for physicians and dentist. Need establish in supporting statement. USBC Section 3411.9.5 and 108.1 would require and be considered alteration under ADA for restriping (**Page 11**). A revised technical code change will be submitted deleting repaving and reconfiguration. The supporting statement will include a cost impact. USBC R320.2 and IBC 1109.16, 16.1 Need code change HBAV/VBCOA that places in appendices to then reference and strike text.
2. Finalize rainwater, gray water and reclaim water code change for consensus approval or non-consensus. Most remaining issues deal with reclaim water and proper links to DEQ regulations and gray water treatment inside a building/home without external discharges. The sub-group is still working on the final language to be proposed. A handout may be available by the date of the meeting.
3. Finalize VBCOA USBC pool code change and coordination with VDH pool regulations. Code changes for consensus or non-consensus approval. Attached are the latest versions. (**Page 12**)
4. 410 and 609 Pool Code – Hand-held showers. (**Page 14**)
5. Finalize marina fixtures USBC IPC with VDH regulations for consensus or non-consensus approval. Harmonization would occur as VDH regulations would then only need to reference the USBC. A code change is being drafted by Skip Harper but has not yet been submitted.
6. Update on I-1 ALF's code changes. The summary of the sub-group's October 31st meeting will be distributed at meeting. Attached is the 2015 G 31 code change I-1 conditions 1 and 2 (**Page 16**). If consensus is reached at this meeting, it will go to the BHCD's CSC December 20th meeting. If no consensus is reached, it will go to the next Workgroup 2 meeting on February 28th.
7. FSBC SFPC code changes for consideration such as fire keys for elevators, newly introduced furniture, fuel truck parking in residential areas, aerial firework displays, placarding, liability insurance, appeal rights and others submitted for the SFPC

administrative and technical code changes for consensus or non-consensus approval from their October 17th meeting. If the code changes have been submitted by this meeting date they will be distributed as hand-outs.

8. 117.1 Temporary Buildings and Structures - finalize homeless shelter code change for consensus or non-consensus approval. **(Page 23)**
9. 903.2.1.3 - Consider A-3 churches scope for sprinklers and TRB case on community centers for churches. **(Page 24)**
10. Update on UST/AST DEQ regulations and coordination for code changes USBC IBC/IFC. Closure of tanks and SWCB regulations govern over USBC. Discussion will be on the role of the SFPC operational and maintenance while operating and when closure occurs. A code change is needed for clarification but none has been submitted yet. If a change is submitted it will be on the next Workgroup 2 meeting for consensus or non-consensus approval. Attached is the proposed text for 9VAC25-91 – Facility and Aboveground Storage Tank (AST) Regulation **(Page 25)**
11. 308.5 - Finalize code change for lock-up cells in non-I-3 occupancies like courthouses-B or police stations for consensus or non-consensus approval. **(Page 59)**
12. 716.5.3.1 - Review code changes for elevator lobby and fire rated corridors code changes for fire service and occupant elevators to correlate with USBC amendment that has no mandated lobby required. **(Page 62)**
13. TRB 903.2.8 review and finalize code change. If consensus is reached, this will be forwarded to the December 20th BHCD's CSC meeting. **(Page 64)**
14. Review submitted energy code changes to finalize consensus or non-consensus approval.
 - USBC IECC C402.4.8. Consensus approval. December 20th BHCD's CSC meeting. **(Page 65)**
 - USBC 1301.1.1. Consensus approval. December 20th, BHCD's CSC meeting. **(Page 66)**
 - USBC C405.1. Consensus approval. December 20th BHCD's CSC meeting. **(Page 67)**
 - USBC C405.6 would cover all exterior lighting. Need to discuss what the USBC scope covers. **(Page 68)**
 - USBC C402.1.1 Avoid conflict IECC internally and ASHRAE 90.1. **(Page 69)**
 - USBC C402.5.2 and 403.2.4.4 grease ducts. Avoids conflict with IMC. **(Page 70)**
 - USBC C202 and R202 – this was opposed by Workgroup 3. **(Page 71)**
15. Review IMC exhaust fan for dryers being on standby power link to NEC, IBC and IFC. This will be taken off the list if no code change is submitted.
16. 507 - Review Type 1 hoods code changes for consensus and non-consensus. There is a question as to whether the commentary **(Page 72)** really says what and how should be enforced so another code change may need to be submitted. The first code change only does A-3 and some feel it needs to include other occupancies like B, I and other occupancies. The 2nd code change is more stringent. Likely to carry over to the next Workgroup 2 meeting. This will also be discussed at the Workgroup 4 meeting on January 10th. **(Page 77)**
17. 1102.2 Design - USBC review accessibility code change submitted by AIA to use ADAAG instead of the ICC IBC and A117.1. **(Page 81)**
18. Review children's toilets allowed in 2012 IBC. There have been questions from NTA concerning this related to modular buildings. This is on list as informational only – no code change is needed.

19. Review VDH abortion regulations for possible USBC coordination. Group can discuss a note being put in the base document. Chapter 412 – Regulations for Licensure of Abortion Facilities is attached. **(Page 85)**
20. 907.2.3 Group E - Review emergency voice communication system. A code change for E occupancy that is currently for 30 occupants in the 2012 IBC has been submitted to leave as is. The A occupancy is 1,000 occupants. If consensus, this will go to the December 20th BHCD's CSC meeting. **(Page 86)**
21. Review code changes on USBC VRC and IBC Chapter 34 on alterations and change of occupancy. The VBCOA Admin. Committee will be submitting a code change.
22. USBC 903.2.7 code change would take current sprinkler requirement in the 2009 USBC from for M occupancy, which is 12,000 s.f. to 5,000 s.f. with upholstered furniture. The 2009 IBC was zero and the Virginia retained the old threshold of 12,000 s.f. The basis for this code change was a South Carolina furniture store fire. The fire data in Virginia doesn't support change. **(Page 88)**
23. USBC NEC 700 emergency lighting loss of power and supply code change. Clarification is needed. **(Page 89)**
24. USBC 2701.11 deleted NM USBC for 4 stories or less apartments. **(Page 90)**
25. IBC 905.2 – Wet standpipe systems. **(Page 91)**
26. IBC 2308 Conventional Light-Frame Construction – Wood framing. **(Page 92)**
27. IBC 3412.2.2.2 - Plumbing, mechanical and electrical requirements for partial change of occupancy. **(Page 94)**
28. IBC 1403.2 – Air barrier requirements from IECC. **(Page 95)**
29. IBC 1007.1 – Accessible means of egress in alterations. **(Page 97)**
30. IBC 908.7 – Carbon monoxide alarms. **(Page 99)**
31. IBC 806.1.2.0 - Combustible material; curtains **(Page 101)**
32. IBC 915 – In-building emergency communication equipment. **(Page 103)**
33. IBC 1001.4 – Emergency plan. **(Page 106)**
34. IBC 508.2.3 – Accessory occupancies. **(Page 107)**
35. IPC 405.3.2 – Location of lavatories in Group E. **(Page 108)**
36. IBC 703.7 – Marking fire-rated assemblies. **(Page 109)**
37. IBC 2902.1 – Reduction in fixtures for outdoor events. **(Page 110)**
38. IBC 509 – Storage room separation. **(Page 112)**
39. IBC 1009.1 – Non-required stairways. **(Page 113)**
40. IBC 1022.5 – Penetrations into stairway compartments. **(Page 114)**
41. 404.3.2 – Fire safety plans **(Page 115)**

New Business:

Next Workgroup 2 meeting: February 28, 2012 finalize proposed USBC and SFPC regulations.

On December 20, 2012 BHCD's CSC will meet and the BHCD/FSB SFPC code committee to meet.

Adjournment

ACCESSIBILITY CODE CHANGES CONFERENCE CALL
October 4, 2012 – 9:30 a.m.

Participants:

Matt Barkley, Fairfax County Family Services, NVAN, ECVN, DSPD
Gayl Brunk, Valley Associates for Independent Living (VAIL)
Vantoria Clay, Endependence Center, Inc. (ECI)
Ron Clements, VBCOA
Ken Fredgren, Reston Accessibility Committee
Karen Michalski-Karney, Blue Ridge Independent Living Center
Terri Barker Morgan, Virginia Board for People with Disabilities
Kenney Payne, AIA
Jodi Roth, Virginia Retail Merchants Association
Emory Rodgers, DHCD
Cindy Davis, DHCD
Vernon Hodge, DHCD
Janice Firestone, DHCD

Invited but were unable to participate: Audrey Clark - Fairfax County, Marcia Dubios – DARS, Mike Toalson - HBAV, Howard Stills - VBCOA, Shaun Pharr - AOBA, Bucky Bryan-Citizen

Summary of Discussions:

Carpet padding: Discussion on eliminating ¼” part of the change. There was an agreement that there is a need to put emphasis on education and training. DHCD will be sure to focus on this. The change will go forward to BHCD as non-consensus

Priority list: Discussion on possible conflict with DOJ interpretation. V. Hodge indicated it is actually in the ADA regulations. This should not be part of the alteration of a building. The code change for restriping parking lots, if approved, should take care of this concern, so the participants in the conference call agreed that DHCD staff could advise the BHCD that the proposal was misplaced in the alteration provisions and that it is encompassed by the restriping proposal.

Restriping: There was objection from local officials. There was agreement that language changes are needed. K. Payne supports and will work with K. Fredgren. The new change will be prepared in time for the Workgroup 2 meeting based on DOJ, which is restriping only. The code change will include a cost impact. DHCD will assist with the reworking of the proposal and supporting statement.

Overview of process: V. Hodge explained that DHCD staff does a staff evaluation for each non-consensus code change. The BHCD will consider non-consensus code changes in March, 2013 and before they approve the proposed regulations April 22, 2013. The proposed regulations will be published and the public can comment, including on non-consensus or consensus code changes in or not in the proposed 2012 USBC. All comments are sent to the BHCD. An additional public hearing will be held in September, 2013.

Total number of parking spaces: Discussion on having over 400 only, but was determined increasing accessible parking spaces at 151 or more was more appropriated. Kenny Payne, AIA representative, wanted to discuss with his members. The original proposal will move forward as non-consensus and a alternative code change can be submitted to reflect discussions regarding the 150 or more parking spaces. There was agreement that DHCD staff could advise the BHCD that the restaurant proposal would not be needed if this proposal went through either as proposed or only affecting parking lots with 150 or more spaces.

Medical and restaurant parking of the original proposal will be split out in new proposals. The medical proposal will use the defined terms "Outpatient clinic" and "Ambulatory Care Facility" to eliminate confusion over how to apply and the proposal will move forward, possibly as consensus depending on further workgroup comments. The term "Outpatient Clinic" will allow the removal of the terms in the HJR648 proposal for "physicians and dentists". DHCD will assist with the reworking of the HJR 649 proposals in the submission of new proposals and supporting statements. Emory's comments: Having to leave the call, the new proposal will have to convey that the use and inclusion of the "outpatient clinic" , based on the IBC definition, would include physician's offices, all physicians, to be at the 10% level, and not as currently required in the IBC T1106.1. The physicans, dentist and building owners will need to be invited into the discussions before there can be deemed to be a consensus.

Universal Design: Discussion on having in code versus the appendix. There is flexibility on certification. Ron C. is concerned that it would have to be brought to attention at the beginning of plan review. It couldn't be turned down for non compliance. He felt the code official would be put in the role of a consultant. There was agreement that no alternative proposal needed to be made and the proposal could move forward, most likely as non-consensus. Emory's comments: having to leave the call, there is probably a way to address the concerns expressed by Ron C. that would be a code change proposal to delete the text that addresses his concerns. The original HJR648 code change would be amended to delete in R320.2, 1109.16 and 1109.16.1 the text

“as dwellings containing universal design features for accessibility”. This would mean the building official would be doing nothing more than they do for required or non-required building components/systems that is approval of the standards specified in Section 1109.16.1 #1 !.1 to 1.5.

Door width: There was discussion on the size of doors needed to comply with the proposal. The HJR648 code change uses 313/4 inches clear width. That can be achieved with a 2' 8" door only with off-set hinges. The proposal would move forward and any proposal by HBAV would be attached to it for mutual consideration. Mike T. had stated at the WG 3 IRC meeting on September 27th that he would have comments to submit on which doors needed to be wider. Emory's comment: This is a WG 3 IRC code change. If consensus can be achieved will have the BHCD's Codes and Standards Committee consider at their December 20th meeting.

Other discussion: Van Spaces – a citizen has raised the issue that there are not enough van spaces available and they are often used by cars. Vantoria C. pointed out that the Federal language specifically states that van spaces are not restricted to only vans. There was not support for a code change proposal to designate van accessible spaces as “van only” spaces. Ron C. noted that in smaller parking lots with one or two parking spaces this would cause a real problem for disabled persons driving automobiles and having available accessible parking spaces. Emory notes that If the BHCD approves any increases in accessible parking spaces by the submitted code changes, this should provide some relief. Documentation of this from the ADA guidelines is attached.

CC:

Senator John Miller

502.3.4 Location. Access aisles shall not overlap the *vehicular way*. Access aisles shall be permitted to be placed on either side of the parking *space* except for angled van parking *spaces* which shall have access aisles located on the passenger side of the parking *spaces*.

Advisory 502.3.4 Location. Wheelchair lifts typically are installed on the passenger side of vans. Many drivers, especially those who operate vans, find it more difficult to back into parking spaces than to back out into comparatively unrestricted vehicular lanes. For this reason, where a van and car share an access aisle, consider locating the van space so that the access aisle is on the passenger side of the van space.

502.4 Floor or Ground Surfaces. Parking *spaces* and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking *spaces* they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

Advisory 502.4 Floor or Ground Surfaces. Access aisles are required to be nearly level in all directions to provide a surface for wheelchair transfer to and from vehicles. The exception allows sufficient slope for drainage. Built-up curb ramps are not permitted to project into access aisles and parking spaces because they would create slopes greater than 1:48.

502.5 Vertical Clearance. Parking *spaces* for vans and access aisles and vehicular routes serving them shall provide a vertical clearance of 98 inches (2490 mm) minimum.

Advisory 502.5 Vertical Clearance. Signs provided at entrances to parking facilities informing drivers of clearances and the location of van accessible parking spaces can provide useful customer assistance.

502.6 Identification. Parking *space* identification signs shall include the International Symbol of *Accessibility* complying with 703.7.2.1. Signs identifying van parking *spaces* shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

Advisory 502.6 Identification. The required "van accessible" designation is intended to be informative, not restrictive, in identifying those spaces that are better suited for van use. Enforcement of motor vehicle laws, including parking privileges, is a local matter.

502.7 Relationship to Accessible Routes. Parking *spaces* and access aisles shall be designed so that cars and vans, when parked, cannot obstruct the required clear width of adjacent *accessible* routes.

Advisory 502.7 Relationship to Accessible Routes. Wheel stops are an effective way to prevent vehicle overhangs from reducing the clear width of accessible routes.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: 2011 HJR 648 Workgroup

Representing: _____

Mailing Address: _____

Email Address: _____

Telephone Number: _____

Proposal Information

Code(s) and Section(s): USBC, Virginia Construction Code Section 1109.16

Proposed Change (including all relevant section numbers, if multiple sections):

Add new Section 1109.16 to read as follows:

1109.16 Carpet pad. Carpet pad, cushion or backing, if used, shall comply with ICC A117.1. The use of the term "firm" in Section 302.2 of ICC A117.1 shall mean that the carpet pad, cushion or backing shall not contribute to the sinking or lowering of the bottom of the carpet or carpet tile more than ¼ inch (6.4 mm) when traversed by the wheels of the user of a wheelchair.

Supporting Statement (including intent, need, and impact of the proposal):

This proposal is to clarify the requirement for firmness of newly installed carpet pad, cushion or backing. The pad, cushion or backing should not contribute to the resistance of movement for wheelchair users beyond that of the carpet itself. It has been noted that heavy padding used in some hotels to achieve a plush look and feel for the floor covering makes it difficult to traverse for a wheelchair user.

Submittal Information

Date Submitted: _____

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
The Jackson Center
501 N. 2nd Street
Richmond, VA 23219-1321

Email Address: taso@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7140 or (804) 371-7150



VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information (Check one): Individual Government Entity Company

Name: 2011 HJR 648 Workgroup Representing: _____

Mailing Address: _____

Email Address: _____ Telephone Number: _____

Proposal Information

Code(s) and Section(s): USBC, Virginia Construction Code Table 1106.1

Proposed Change (including all relevant section numbers, if multiple sections):

Modify table as shown:

TABLE 1106.1
ACCESSIBLE PARKING SPACES

TOTAL PARKING SPACES PROVIDED	REQUIRED MINIMUM NUMBER OF ACCESSIBLE SPACES
1 to 25	1
26 to 50	2 3
51 to 75	3 4
76 to 100	4 5
101 to 150	5 6
151 to 200	6 7
201 to 300	7 8
301 to 400	8 10
401 to 500	9 12
501 to 1000	2 3% of total
1,001 and over	20 30, plus one two for each 100, or fraction thereof, over 1,000

Supporting Statement (including intent, need, and impact of the proposal):

This code change increases overall accessible parking spaces in all occupancies compared to the specific occupancies in Sections 1106.2 through 1106.4. There is attached some data on the growing elderly and aging of our citizenry. This code change could also be considered in addition to two other proposals from the HJR 648 workgroup for accessible parking, especially the proposal for increased parking spaces for doctor and dentist offices and eating establishments. It has been more than 20 years since the table in the code has been in existence without change.

Submittal Information

Date Submitted: _____

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: _____

Representing: _____

Mailing Address: _____

Email Address: _____

Telephone Number: _____

Proposal Information

Code(s) and Section(s): USBC, Virginia Construction Code Table 1106.1

Proposed Change (including all relevant section numbers, if multiple sections):

Modify table as shown:

TABLE 1106.1
ACCESSIBLE PARKING SPACES

TOTAL PARKING SPACES PROVIDED	REQUIRED MINIMUM NUMBER OF ACCESSIBLE SPACES
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5 6
151 to 200	6 7
201 to 300	7 8
301 to 400	8 10
401 to 500	9 12
501 to 1000	2 3% of total
1,001 and over	20 30, plus one two for each 100, or fraction thereof, over 1,000

Supporting Statement (including intent, need, and impact of the proposal):

This proposal results from the initial review by DHCD workgroups of proposals submitted by a legislative study group (the HJR 648 study group). This proposal is intended to be a compromise proposal to the one submitted by the HJR 648 study group and is being submitted by groups involved in the HJR 648 study. The compromise is to only require additional accessible parking spaces in larger parking lots whereas the HJR 648 proposal increased the number of accessible spaces across the board. It is believed that a companion proposal requiring accessible spaces to be provided, if not already present, when a parking lot is restriped will serve to increase accessible spaces in the smaller parking lots.

Submittal Information

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: 2011 HJR 648 Workgroup

Representing: _____

Email Address: _____

Telephone Number: _____

Proposal Information

Code(s) and Section(s): USBC, Virginia Construction Code Section 1106.3

Proposed Change (including all relevant section numbers, if multiple sections):

Change Section 1106.3 to read as follows:

1106.3 ~~Hospital outpatient~~ Outpatient clinics and ambulatory health care facilities. At least 10 percent, but not less than one, of care recipient and visitor parking spaces provided to serve ~~hospital outpatient~~ clinics and ambulatory health care facilities shall be accessible.

Supporting Statement (including intent, need, and impact of the proposal):

This proposal would require slightly more accessible spaces at newly constructed outpatient clinics and ambulatory surgery centers. The IBC already requires the additional spaces for medical facilities which are on hospital campuses.

Submittal Information

Date Submitted: _____

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
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DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: 2011 HJR 648 Workgroup

Representing: _____

Mailing Address: _____

Email Address: _____

Telephone Number: _____

Proposal Information

Code(s) and Section(s): USBC, Virginia Construction Code Sections 108.1 and 3411.9.5

Proposed Change (including all relevant section numbers, if multiple sections):

Add new Item #5 to Section 108.1 and add new Section 3411.9.5 to read as follows:

5. Restriping, resurfacing or reconfiguring a parking lot which would be required to provide accessible parking spaces if newly constructed.

3411.9.5 Accessible parking spaces. When existing parking lots are restriped, resurfaced or reconfigured, accessible parking spaces shall be provided as required for newly constructed parking lots.

Supporting Statement (including intent, need, and impact of the proposal):

This proposal is to modify the USBC to be consistent with the U.S. Department of Justice's legal brief that restriping of parking lots is an alteration under the Americans with Disabilities Act (ADA) and must comply with the ADA's alteration rules. The proposal also adds a requirement for permits to be obtained when restriping, reconfiguration or resurfacing of a parking lot occurs to assure compliance. The code change would not require a building official to actively inform owners to restripe parking lots and would only apply when restriping, resurfacing or reconfiguration of a parking lot is untaken at the option of an owner. When restriping, resurfacing or reconfiguration occurs, if meeting the current requirements for accessible parking spaces is technically infeasible, as with other types of alterations, the rules for new construction do not apply. This requirement would not affect dirt, gravel or grass parking lots. It could require an existing lot to add accessible spaces, signage, van spaces or correct dimensional mistakes.

Submittal Information

Date Submitted: _____

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Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: _____

Representing: _____

Mailing Address: _____

Email Address: _____

Telephone Number: _____

Proposal Information

Code(s) and Section(s): USBC, Virginia Construction Code Sections 108.1 and 3411.9.5

Proposed Change (including all relevant section numbers, if multiple sections):

Add new Item #5 to Section 108.1 and add new Section 3411.9.5 to read as follows:

5. Restriping a parking lot which would be required to provide accessible parking spaces if newly constructed.

3411.9.5 Accessible parking spaces. When existing parking lots are restriped, accessible parking spaces shall be provided as required for newly constructed parking lots.

Supporting Statement (including intent, need, and impact of the proposal):

This proposal results from the initial review by DHCD workgroups of proposals submitted by a legislative study group (the HJR 648 study group). This proposal is intended to be a compromise proposal to the one submitted by the HJR 648 study group and is being submitted by groups involved in the HJR 648 study. The compromise is to limit the language in the proposal to only that in the legal brief by the U.S. Department of Justice, which is only the restriping of parking lots. The HJR 648 study group proposal included reconfiguring and resurfacing of parking lots, which may be more difficult to enforce and extend further than the Department of Justice's concern.

Submittal Information

Date Submitted: _____

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Please submit the proposal to:

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The Jackson Center
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Email Address: taso@dhcd.virginia.gov
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VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information (Check one): Individual Government Entity Company

Name: DHCD Workgroup 4, sub-workgroup 2 (pools and marinas)

Proposal Information

Code(s) and Section(s): VCC (IBC and IPC)

Proposed Change (including all relevant section numbers, if multiple sections):

Change Section 303.6 of the IBC as shown:

303.6 Assembly Group A-5. Assembly used intended for participation in or viewing outdoor activities including, but not limited to:

- Amusement park structures
- Bleachers
- Grandstands
- Stadiums
- Swimming pools

Change the Group A-5 row of Table 403.1 of the IPC and Table 2902.1 of the IBC and add a new footnote "h" as shown:

OCCUPANCY	DESCRIPTION	(remainder unchanged)
A-5	Stadiums, amusement parks, <u>pools</u> , bleachers and grandstands for outdoor sporting events and activities ^h	(remainder unchanged)

h. The occupant load for pools shall be in accordance with the "Skating rinks, swimming pools" category of Table 1004.1.2 of the International Building Code (of "this code" for the IBC table).

Supporting Statement (including intent, need, and impact of the proposal):

This proposal is to set minimum plumbing fixture requirements for bathrooms at outdoor swimming pools to correlate with requirements of the Virginia Department of Health (VDH) for fixtures at swimming pools under their authority as a matter of functional design and to permit VDH to delete the requirements in their regulations since they could be perceived as "building regulations" which would be superseded by the USBC.

Submittal Information

Date Submitted: _____

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: DHCD Workgroup 4, sub-workgroup 2 (pools and marinas)

Proposal Information

Code(s) and Section(s): VCC (IBC and IRC)

Proposed Change (including all relevant section numbers, if multiple sections):

In Chapter 2 of the IBC, change the following definition to read as follows:

Swimming pool. An aquatic vessel as defined in the International Swimming Pool and Spa Code. Where the use of the term is indicative of a specific type of aquatic vessel, such as a public swimming pool or a residential swimming pool, then the term may be deemed to mean that specific type of aquatic vessel.

Change the title of Section 3109 of the IBC to read as follows and replace the text of Section 3109 with the following:

Section 3109

Swimming Pools, Swimming Pool Enclosures and Aquatic Recreational Facilities

3109.1 General. Swimming pools, swimming pool enclosures and aquatic recreational facilities, as that term is defined in the International Swimming Pool and Spa Code, shall comply with applicable provisions of the International Swimming Pool and Spa Code.

Change Items 27 and 28 of Section 310.6 of the VCC(IBC) to read as follows:

27. Add Section R325 Swimming Pools, Spas and Hot Tubs.

28. Add Section R325.1 to read:

R325.1 Use of Appendix G for swimming. Swimming pools, spas and hot tubs. In addition to other applicable provisions of this code, swimming pools, spas and hot tubs as defined in the Virginia Construction Code, shall comply with the applicable provisions of Appendix G the International Swimming Pool and Spa Code.

Supporting Statement (including intent, need, and impact of the proposal):

This proposal will incorporate the International Swimming Pool and Spa Code (ISPSC) for the construction of aquatic vessels, as defined by the ISPSC, which includes both residential and public swimming pools, spas and hot tubs. This proposal would also have the ISPSC apply to the construction of new aquatic recreational facilities, such as wave pools or lazy rivers. The existing exception for when a permit is needed for a pool is left intact, however the threshold for what constitutes a pool under the ISPSC is different than what is currently under the IBC, reducing the depth of water from 24 inches to 12 inches, but not applying unless the aquatic vessel is designed to have a circulating system.

Submittal Information

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Organization

Name: J. Kenneth Payne, Jr., AIA

Representing: VSAIA

Mailing Address: 3200 Norfolk Street, Richmond, VA 23230

Email Address: kpayne@moseleyarchitects.com

Telephone Number: 804.794.7555

Proposal Information

Code(s) and Section(s): **2012 ISPSC, Table of Contents, and Sections 410 and 609.3.1**

Proposed Change (including all relevant section numbers, if multiple sections):

Revise Table of Contents, as follows:

CHAPTER 6 AQUATIC RECREATION FACILITIES

609 ~~Toilet Rooms and Bathrooms~~ Dressing and Sanitary Facilities

Add new Section 410.2, as follows:

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.

401.2.3 Water heater and mixing valve. Bather access to water heaters and thermostatically controlled mixing valves for showers shall be prohibited.

401.2.4 Flow rate. Each showerhead shall have a water flow of not less than 2 gallons per minute (7.6 lpm).

401.2.5 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).

Revise title of Section 609, as follows:

SECTION 609
TOILET ROOMS AND BATHROOMS DRESSING AND SANITARY FACILITIES

Revise Section 609.3.1, as follows:

609.3.1 Deck hand shower or shower spray unit. Not less than one ~~shower~~ 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.

Supporting Statement (including intent, need, and impact of the proposal):

Revised the title of Section 609 to be the same as Section 410, and because Section 609.3.1 includes showers that are required on the pool deck, which is not a part of a *toilet room* or *bathroom* – but are a part of *sanitary facilities*. In this case, the term “sanitary facilities” is more inclusive than the terms “toilet room” or “bathroom” when it comes to a showerhead on a pool deck.

The Sub-workgroup 2 ISPSC Committee felt public swimming pools (or anything governed by Chapter 4) should also have a showerhead facility on the pool deck. The language is duplicated from Section 609.3.

The terms “hand shower” (term used by ICC A117.1) and “shower spray unit” (term used by the 2004 ADAAG) are substituted for the term “shower(s)” to avoid the interpretation that full-size transfer and/or roll-in type showers would need to be provided to meet the accessibility requirements for “showers” (which include grab bars, seats, dispensers, etc.). By using the terms “hand shower” and “shower spray unit,” it is clear the intent is not to provide a transfer and/or roll-in type shower with grab bars or seats, but merely a showerhead with controls that must meet the accessibility requirements for a hand-held showerhead.

Submittal Information

Date Submitted: August 16, 2012

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: taso@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7140 or (804) 371-7150



G31 – 12

PART I – INTERNATIONAL BUILDING CODE

202, 308.3, 308.3.1, 308.3.2, 308.4.1, 310.6, 310.6.1 (NEW), 310.6.2 (NEW), 420, 420.1, 420.4 (NEW), 420.4.1 (NEW), 504.2, 709.5, 1018.1; (IFC [B] 202, 1018.1)

PART II – INTERNATIONAL FIRE CODE

IFC 903.2.6, 903.2.8.1, 903.2.8.2, 903.2.8.3 (NEW), 903.2.8.3.1 (NEW), 903.2.8.3.2 (NEW), 903.3.1.3, 907.2.6.1; (IBC [F] 420.5, 903.2.6, 903.2.8.1, 903.2.8.2, 903.2.8.3 (NEW), 903.2.8.3.1 (NEW), 903.2.8.3.2 (NEW), 903.3.1.3, 907.2.6.1)

Proponent: Carl Baldassarra, P.E., FSFPE Chair, ICC Code Technology Committee

THIS IS A 2 PART CODE CHANGES. BOTH PARTS WILL BE HEARD BY HEARD BY THE IBC GENERAL CODE COMMITTEE AS 2 SEPARATE CODE CHANGES. SEE THE TENTATIVE HEARING ORDER FOR THE IBC GENERAL COMMITTEE.

PART I – INTERNATIONAL BUILDING CODE

Revise as follows:

SECTION 202 DEFINITIONS

24-HOUR CARE BASIS. The actual time that a person is an occupant within a facility for the purpose of receiving care. It shall not include a facility that is open for 24 hours and is capable of providing care to someone visiting the facility during any segment of the 24 hours.

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. Custodial care ~~include~~ includes occupants ~~who~~ that have the ability to respond to emergency situations and evacuate at a slower rate and/or who have mental and psychiatric complications.

GROUP HOME. A facility for social rehabilitation, substance abuse or mental health problems that contains a group housing arrangement that provides *custodial care* but does not provide ~~æute~~ acute medical care.

SECTION 308 INSTITUTIONAL GROUP I

308.3 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*. ~~The persons receiving care are capable of self preservation.~~ Buildings of Group I-1 shall be classified as one of the occupancy conditions indicated in Sections 308.3.1 or 308.3.2. This group shall include, but not be limited to, the following:

- Alcohol and drug centers
- Assisted living facilities
- Congregate care facilities
- Convalescent facilities
- Group homes*
- Halfway houses
- Residential board and ~~custodial~~ *care* facilities
- Social rehabilitation facilities

308.3.1 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.

308.3.2 Condition 2. This occupancy condition shall include buildings in which there are any persons receiving custodial care who require limited verbal or physical assistance while responding to an emergency situation to complete building evacuation.

~~308.3.2~~ **308.3.3** Six to sixteen persons receiving custodial care. A facility ~~such as above,~~ housing not fewer than six and not more than 16 persons receiving such custodial care, shall be classified as Group R-4.

~~308.3.4~~ **308.3.4** Five or fewer persons receiving custodial care. A facility ~~such as the above~~ with five or fewer persons receiving such custodial care shall be classified as Group R-3 or shall comply with the *International Residential Code* provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or with Section P2904 of the *International Residential Code*.

308.4 Institutional 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 selfpreservation*. This group shall include, but not be limited to, the following:

- Foster care facilities*
- Detoxification facilities*
- Hospitals*
- Nursing homes*
- Psychiatric hospitals*

~~308.4.1~~ **308.4.1** Five or fewer persons receiving medical care. A facility ~~such as the above~~ with five or fewer persons receiving such medical care shall be classified as Group R-3 or shall comply with the *International Residential Code* provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or with Section P2904 of the *International Residential Code*.

SECTION 310 RESIDENTIAL GROUP R

310.6 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 residential environment and receive *custodial care*. ~~The persons receiving care are capable of self-preservation.~~ Buildings of Group R-4 shall be classified as one of the occupancy conditions indicated in Sections 310.6.1 or 310.6.2 This group shall include, but not be limited to, the following:

- Alcohol and drug centers
- Assisted living facilities
- Congregate care facilities
- Convalescent facilities
- Group homes*
- Halfway houses
- Residential board and custodial care facilities
- Social rehabilitation facilities

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code.

310.6.1 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.

310.6.2 Condition 2. This occupancy condition shall include buildings in which there are any persons receiving custodial care who require limited verbal or physical assistance while responding to an emergency situation to complete building evacuation.

SECTION 420 GROUPS I-1, R-1, R-2, R-3, R-4

420.1 General. Occupancies in Groups I-1, R-1, R-2 and R-3 and R-4 shall comply with the provisions of Sections 420.1 through 420.5 420.6 and other applicable provisions of this code.

420.4 Smoke barriers in Group I-1 Condition 2. Smoke barriers shall be provided in Group I-1 Condition 2 to subdivide every story used by persons receiving care, treatment or sleeping and to provide other stories with an occupant load of 50 or more persons, into no fewer than two smoke compartments. Such stories shall be divided into smoke compartments with an area of not more than 22,500 square feet (2092 m²) and the travel distance from any point in a smoke compartment to a smoke barrier door shall not exceed 200 feet (60 960 mm). The smoke barrier shall be in accordance with Section 709.

420.4.1 Refuge area. Refuge areas shall be provided within each smoke compartment. The size of the refuge area shall accommodate the occupants and care recipients from the adjoining smoke compartment. Where a smoke compartment is adjoined by two or more smoke compartments, the minimum area of the refuge area shall accommodate the largest occupant load of the adjoining compartments. The size of the refuge area shall provide the following:

1. Not less than 15 net square feet (1.4 m²) for each care recipient.
2. Not less than 6 net square feet (0.56 m²) for other occupants.

Areas or spaces permitted to be included in the calculation of the refuge area are corridors, lounge or dining areas and other low hazard areas.

[F] 420.4 420.5 Automatic sprinkler system. (No change)

[F] 420.5 420.6 Smoke detection and fire alarm system. (see Part II)

SECTION 504 BUILDING HEIGHT

504.2 Automatic sprinkler system increase. Where a building is equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1, the value specified in Table 503 for maximum *building height* is increased by 20 feet (6096 mm) and the maximum number of *stories* is increased by one. These increases are permitted in addition to the *building area* increase in accordance with Sections 506.2 and 506.3. For Group R buildings equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.2, the value specified in Table 503 for maximum *building height* is increased by 20 feet (6096 mm) and the maximum number of *stories* is increased by one, but shall not exceed 60 feet (18 288 mm) or four *stories*, respectively.

Exception: The use of an *automatic sprinkler system* to increase *building heights* shall not be permitted for the following conditions:

1. Buildings, or portions of buildings, classified as a Group I-1 Condition 2, of Type IIB, III, IV or V construction or Group I-2 occupancy occupancies of Type IIB, III, IV or V construction.
2. Buildings, or portions of buildings, classified as a Group H-1, H-2, H-3 or H-5 occupancy.
3. Buildings where an *automatic sprinkler system* is substituted for fire-resistance rated construction in accordance with Table 601, Note d.

**SECTION 709
SMOKE BARRIERS**

709.5 Openings. Openings in a *smoke barrier* shall be protected in accordance with Section 716.

Exceptions:

1. In Group I-1 Condition 2, Group I-2 and ambulatory care facilities, where doors are installed across *corridors*, a pair of opposite- swinging doors without a center mullion shall be installed having vision panels with fire-protection- rated glazing materials in fire-protection-rated frames, the area of which shall not exceed that tested. The doors shall be close fitting within operational tolerances, and shall not have undercuts in excess of 3/4-inch, louvers or grilles. The doors shall have head and jamb stops, astragals or rabbets at meeting edges and shall be automatic-closing by smoke detection in accordance with Section 716.5.9.3. Where permitted by the door manufacturer's listing, positive-latching devices are not required.
2. In Group I-1 Condition 2, Group I-2 and ambulatory care facilities, horizontal sliding doors installed in accordance with Section 1008.1.4.3 and protected in accordance with Section 716.

**SECTION 1018 (IFC [B] 1018)
CORRIDORS**

1018.1 (IFC [B] 1018.1) Construction. *Corridors* shall be fire-resistance rated in accordance with Table 1018.1. The *corridor walls* required to be fire-resistance rated shall comply with Section 708 for *fire partitions*.

Exceptions:

1. A *fire-resistance rating* is not required for *corridors* in an occupancy in Group E where each room that is used for instruction has at least one door opening directly to the exterior and rooms for assembly purposes have at least one-half of the required *means of egress* doors opening directly to the exterior. Exterior doors specified in this exception are required to be at ground level.
2. A *fire-resistance rating* is not required for *corridors* contained within a dwelling or sleeping unit in an occupancy in Group I-1 and Group R.
3. A *fire-resistance rating* is not required for *corridors* in *open parking garages*.
4. A *fire-resistance rating* is not required for *corridors* in an occupancy in Group B which is a space requiring only a single *means of egress* complying with Section 1015.1.
5. *Corridors* adjacent to the *exterior walls* of buildings shall be permitted to have unprotected openings on unrated *exterior walls* where unrated walls are permitted by Table 602 and unprotected openings are permitted by Table 705.8.

PART II – INTERNATIONAL FIRE CODE

Revise as follows:

IBC [F] 420.5 ~~420.6~~ Smoke detection and fire alarm systems and smoke alarms. Fire alarm systems and smoke alarms shall be provided in Group I-1, R-1, ~~and R-2~~ and Group R-4 occupancies in accordance with Sections 907.2.6, 907.2.8, ~~and 907.2.9 and 907.2.10~~, respectively. Single- or multiple-station smoke alarms shall be provided in Groups I-1, R-2, R-3 and R-4 in accordance with Section 907.2.11.

**SECTION 903 (IBC [F] 903)
AUTOMATIC SPRINKLER SYSTEMS**

903.2.6 (IBC [F] 903.2.6) Group I. An automatic sprinkler system shall be provided throughout buildings with a Group I fire area.

Exceptions:

1. An automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be permitted in Group I-1 Condition 1 facilities.
- ~~2. An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be allowed in Group I-1 facilities when in compliance with all of the following:~~
 - ~~2.1. A hydraulic design information sign is located on the system riser~~
 - ~~2.2. Exception 1 of Section 903.4 is not applied, and~~
 - ~~2.3. Systems shall be maintained in accordance with the requirements of Section 903.3.1.2.~~
- 2.3. An automatic sprinkler system is not required where Group I-4 day care facilities are at the level of exit discharge and where every room where care is provided has at least one exterior exit door.
- 3.4. In buildings where Group I-4 day care is provided on levels other than the level of exit discharge, an automatic sprinkler system in accordance with 903.3.1.1 shall be installed on the entire floor where care is provided and all floors between the level of care and the level of exit discharge, all floors below the level of exit discharge, other than areas classified as an open parking garage.

903.2.8 (IBC [F] 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.

903.2.8.1 (IBC [F] 903.2.8.1) Group R-3 or R-4 ~~congregate residence.~~ An automatic sprinkler system installed in accordance with 903.3.1.3 shall be permitted in Group R-3. ~~or R-4 congregate residence with 16 or fewer residents.~~

903.2.8.2 (IBC [F] 903.2.8.2) Group R-4 Condition 1. An automatic sprinkler system installed in accordance with 903.3.1.3 shall be permitted in Group R-4 Condition 1.

903.2.8.3 (IBC [F] 903.2.8.3) Group R-4 Condition 2. An automatic sprinkler system installed in accordance with 903.3.1.2 shall be permitted in Group R-4 Condition 2. Attics shall be protected in accordance with Sections 903.2.8.3.1 or 903.2.8.3.2.

903.2.8.3.1 (IBC [F] 903.2.8.3.1) Attics used for living purposes, storage or fuel fired equipment. Attics used for living purposes, storage or fuel fired equipment shall be protected throughout with automatic sprinkler system installed in accordance with 903.3.1.2.

903.2.8.3.2 (IBC [F] 903.2.8.3.2) Attics not used for living purposes, storage or fuel fired equipment . Attics not used for living purposes, storage or fuel fired equipment shall be protected in accordance with one of the following:

1. Attics protected throughout by a heat detector system arranged to activate the building fire alarm system in accordance with Section 907.2.10.
2. Attics constructed of non-combustible materials.
3. Attics constructed of fire-retardant-treated wood framing complying with Section 2303.2.
4. The automatic fire sprinkler system shall be extended to provide protection throughout the attic space.

903.2.8.2 903.2.8.4 (IBC [F] 903.2.8.2 903.2.8.4) Care facilities. An automatic sprinkler system installed in accordance with 903.3.1.3 shall be permitted in care facilities with 5 or fewer individuals in a single family dwelling.

903.3.1.3 (IBC [F] 903.3.1.3) NFPA 13D sprinkler systems. Automatic sprinkler systems installed in one and two-family dwellings, Group R-3, and R-4 ~~congregate residences~~ Condition 1 and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D.

SECTION 907 (IBC [F] 907) FIRE ALARM AND DETECTION SYSTEMS

907.2.6.1 (IBC [F] 907.2.6.1) Group I-1. In Group I-1 occupancies, an automatic smoke detection system shall be installed in corridors, waiting areas open to corridors and habitable spaces other than sleeping units and kitchens. The system shall be activated in accordance with Section 907.5.

Exceptions:

1. For Group I-1 Condition 1 smoke Smoke detection in habitable spaces is not required where the facility is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
2. Smoke detection is not required for exterior balconies.

Reason: The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. The code issues are assigned to the CTC by the ICC Board as "areas of study". Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: <http://www.iccsafe.org/cs/cc/ctc/index.html>. Since its inception in April, 2005, the CTC has held twenty-two meetings – all open to the public.

GENERAL PURPOSE

The current IBC requires all occupants receiving Custodial Care to be able to evacuate on their own without any assistance from others. Most state Custodial Care (assisted living/ residential care/ group homes) licensing agencies allow occupants who require limited assistance with evacuation.¹ The lack of consistency between what the states allow and the IBC Custodial Care provisions causes inconsistent application of the IBC.² This proposal resolves that conflict and will result in better consistency. The proposal integrates allowing both residents who require limited assistance with evacuation and those that do not in Custodial Care occupancies. It accomplishes this while maintaining current residential occupancy safeguards along with adding appropriate Group I-2 safeguards, for those requiring assistance with evacuation.

The proposed Group I-1 and R-4 custodial care revisions accomplish the following:

- It provides "condition classifications" for both Groups I-1 and R-4. It makes Condition 1 for the buildings, as currently allowed, with residents capable of responding on their own during emergencies. It adds a Condition 2 for buildings residents who may require some assistance with evacuation.
- The added "condition" classification is already utilized in Group I-3 and is also proposed to be included in Group I-2, under a separate proposal by the ICC Ad Hoc Committee on Healthcare.
- It adds to the new Group I-1 Condition 2, four more stringent requirements due to the new resident type allowed, in addition to the existing current Group I-1 Condition 1 requirements: story limitations, smoke barriers, increased sprinkler protection, and additional smoke detection.
- It adds to the new Group R-4 Condition 2, due to the new resident type allowed, two more stringent requirements in addition to the capable Group R-4 Condition 1 requirements: story limitations, and additional attic detection or protection, considering the smaller facilities.
- It clarifies in the revised Custodial Care definition and in Group I-1 and R-4 Condition 2 occupancies that they are not Group I-2, which provides Medical Care. Group I-1 Custodial Care has persons with some physical or mental limitations, who may require limited assistance in emergency evacuation, but who are still capable enough to participate in complete building evacuation during emergencies. This limit of the level of care or resident type in Group I-1, and R-4 does not include Group I-2 higher acuity occupants who require full nursing care or Medical Care as defined. Those receiving Medical Care in Group I-2 may be bedridden during emergencies, may be on life support systems, or may be semiconscious or unconscious, all in which evacuation concepts allows for defend in place strategies.
- It leaves the other current IBC base I-1/ R-4 requirements, and the capable Group I-1 and R-4 Condition 1 requirements unchanged from the current code, except for minor clerical revisions.
- The substantiation for both the IBC and correlating IFC changes relating to this Group I-1/R4 proposal are integrated below in IBC section order, to provide a comprehensive correlation of both sets of changes for both codes.

GENERAL REASONS AND SUBSTANTIATION

The new Group I-1 Condition 2 requirements add appropriate Group I-2 protection features. It also maintains more restrictive Group I-1 residential protection features than current Group I-2 requirements. Other differences between Group I-1 and Group I-2 are also maintained. The numerous differences between Group I-1/ R-4 Custodial Care and Group I-2 Medical Care occupancies in relation to resident types, care levels, and functional facility design concepts relating to protection noted below, substantiate why it is appropriate to regulate them differently in separate occupancy groups.

CTC SUPPORTING DOCUMENTATION FOR G31 – 12

Groups I-1/R-4 Custodial Care Compared to Group I-2 Health Care

The Following is an Excerpt from the Reason Statement for G31 – 12

"The current IBC requires all occupants receiving Custodial Care to be able to evacuate on their own without any assistance from others. Most state Custodial Care (assisted living/ residential care/ group homes) licensing agencies allow occupants who require limited assistance with evacuation. The lack of consistency between what the states allow and the IBC Custodial Care provisions causes inconsistent application of the IBC. This proposal resolves that conflict and will result in better consistency. The proposal integrates allowing both residents who require limited assistance with evacuation and those that do not in Custodial Care occupancies. It accomplishes this while maintaining current residential occupancy safeguards along with adding appropriate Group I-2 safeguards, for those requiring assistance with evacuation.

The proposed Group I-1 and R-4 custodial care revisions accomplish the following:

- It provides "condition classifications" for both Groups I-1 and R-4. It makes Condition 1 for the buildings, as currently allowed, with residents capable of responding on their own during emergencies. It adds a Condition 2 for buildings residents who may require some assistance with evacuation.
- The added "condition" classification is already utilized in Group I-3 and is also proposed to be included in Group I-2, under a separate proposal by the ICC Ad Hoc Committee on Healthcare.
- It adds to the new Group I-1 Condition 2, four more stringent requirements due to the new resident type allowed, in addition to the existing current Group I-1 Condition 1 requirements: story limitations, smoke barriers, increased sprinkler protection, and additional smoke detection.
- It adds to the new Group R-4 Condition 2, due to the new resident type allowed, two more stringent requirements in addition to the capable Group R-4 Condition 1 requirements: story limitations, and additional attic detection or protection, considering the smaller facilities.
- It clarifies in the revised Custodial Care definition and in Group I-1 and R-4 Condition 2 occupancies that they are not Group I-2, which provides Medical Care. Group I-1 Custodial Care has persons with some physical or mental limitations, who may require limited assistance in emergency evacuation, but who are still capable enough to participate in complete building evacuation during emergencies. This limit of the level of care or resident type in Group I-1 and R-4 does not include Group I-2 higher acuity occupants who require full nursing care or Medical Care as defined. Those receiving Medical Care in Group I-2 may be bedridden during emergencies, may be on life support systems, or may be semiconscious or unconscious, all in which evacuation concepts allows for defend in place strategies.
- It leaves the other current IBC base I-1/ R-4 requirements, and the capable Group I-1 and R-4 Condition 1 requirements unchanged from the current code, except for minor clerical revisions."

Assisted living facilities are currently regulated as an I-1. G31 notes that assisted living facilities contain two distinct types of persons requiring custodial care for which a simple classification as an I-1 is inadequate:

- Those capable of responding to an emergency and evacuate (Proposed Condition 1)
- Those requiring verbal or physical assistance in order to respond to an emergency and evacuate (Proposed Condition 2)

In this regard, even an I-2 classification would be inadequate for those requiring assistance to respond and evacuate. This is in part due to defend in place strategy of the IBC for Group I-2 coupled with higher acuity occupants, higher staff ratios, and different physical settings.

The table on the next page illustrates this by comparing the resulting provisions from the approval of G31 – 12 compared to the requirements for Group I-2.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: John Catlett

Representing: VBCOA Administration Committee

Mailing Address: 301 King Street, Alexandria, Virginia 22314

Email Address: john.catlett@alexandriava.gov

Telephone Number: 703.746.4182

Proposal Information

Code(s) and Section(s): 117.1 Temporary Buildings, Structures and Uses

Proposed Change (including all relevant section numbers, if multiple sections):

117.1 Temporary building and, structures. The building official is authorized to issue a permit for temporary buildings or structures, and. Such permits shall be limited as to time of service, but shall not be permitted for more than one year, except that upon the permit holder's written request, the building official may grant one or more extensions of time, not to exceed one year per extension. The building official is authorized to terminate the approval and order the demolition, removal of temporary buildings or structures during the period authorized by the permit when determined necessary.

117.1.1 Temporary uses within existing buildings and structures. The building official shall review and may approve conditions or modifications for temporary uses, including hypothermia and hyperthermia shelters, that may be necessary as long as they meet the spirit and functional intent with this code. The building official is authorized to terminate the approval and order the discontinuance of the temporary use during the period authorized by the permit when determined necessary.

Supporting Statement (including intent, need, and impact of the proposal):

It has been identified that some localities have not allowed temporary uses such as shelters and other uses except in buildings meeting all of the requirements for the proposed uses. The proposed changes will clearly allow the building officials to consider alternatives and approve them for temporary uses. This will allow consideration of the risk vs. benefit associated with short term temporary uses. This can provide flexibility to consider temporary uses for things such as hyper/hypothermia shelters, overnight events such as Club or youth group overnight events at churches, fundraising events of very limited duration while considering alternatives such as fire watches, occupancy limitations, single station smoke detection, etc.

Submittal Information

Date Submitted: August 21, 2012

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual x Government Entity Company

Name: Frank Castelvechi, III PE

Representing: County of Henrico Building Inspections

Mailing Address: PO Box 90775, Henrico VA 23273

Email Address: cas13@co.henrico.va.us

Telephone Number: 804 501 4375

Proposal Information

Code(s) and Section(s): VA Construction code 903.2.1.3 base document

Proposed Change (including all relevant section numbers, if multiple sections):

[C. Change Item 2 of Section 903.2.1.3 of the IBC to read:
2. In Group A-3 occupancies other than ~~churches~~ places of religious worship, the fire area has an occupant load of 300 or more; or

Supporting Statement (including intent, need, and impact of the proposal):
This proposed change is to provide inclusive language using a defined term consistent with that used in the IBC

Submittal Information

Date Submitted: _____

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR SBCO (State Building Codes Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: Vernon.hodge@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7150





Proposed Text

Action: Incorporate Requirements of Chapter 884 (2011) and Clarify ...

Stage: Proposed

6/11/12 11:00 AM

CHAPTER 91

FACILITY AND ABOVEGROUND STORAGE TANK (AST) REGULATION

Part I

Program Administration

9VAC25-91-10. Definitions.

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

"Aboveground storage tank" or "AST" means any one or combination of tanks, including pipes, used to contain an accumulation of oil at atmospheric pressure, and the volume of which, including the volume of the pipes, is more than 90% above the surface of the ground. This term does not include line pipe and breakout tanks of an interstate pipeline regulated under the federal Accountable Pipeline Safety and Partnership Act of 1996 (49 USC § 60101 et seq.).

"Board" means the State Water Control Board.

"Containment and cleanup" means abatement, containment, removal and disposal of oil and, to the extent possible, the restoration of the environment to its existing state prior to an oil discharge.

"Corrosion professional" means a person who by reason of thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person shall be accredited or certified as being qualified by the National Association of Corrosion Engineers or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control of buried or submerged metal piping systems and metal tanks.

"Department" means the Department of Environmental Quality (DEQ).

"Discharge" means any spilling, leaking, pumping, pouring, emitting, emptying, or dumping.

"Elevated tank" means an AST which is not in contact with the ground and which is raised above the surface of the ground.

"Facility" means any development or installation within the Commonwealth that deals in, stores or handles oil and includes a pipeline.

"Flow-through process tank" means (as defined in 40 CFR Part 280) a tank that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. Flow-through process tanks do not include tanks used for the storage of materials prior to their introduction into the production process or for the storage of finished products or by-products from the production process.

"Local building official" means the person authorized by the Commonwealth to enforce the provisions of the Uniform Statewide Building Code (USBC).

"Local director or coordinator of emergency services" means any person appointed pursuant to § 44-146.19 of the Code of Virginia.

"Major repair" means alterations that refer to operations that require cutting, additions, removal or replacement of the annular plate ring, the shell-to-bottom weld or a sizable portion of the AST shell.

"Oil" means oil of any kind and in any form, including, but not limited to, petroleum and petroleum by-products, fuel oil, lubricating oils, sludge, oil refuse, oil mixed with other wastes, crude oils, and all other liquid hydrocarbons regardless of specific gravity.

"Operator" means any person who owns, operates, charters by demise, rents, or otherwise exercises control over or responsibility for a facility or a vehicle or a vessel.

"Person" means an individual; trust; firm; joint stock company; corporation, including a government corporation; partnership; association; any state or agency thereof; municipality; county; town; commission; political subdivision of a state; any interstate body; consortium; joint venture; commercial entity; the government of the United States or any unit or agency thereof.

"Pipes" or "piping" means a pressure-tight cylinder used to convey a fluid or to transmit a fluid pressure and is ordinarily designated "pipe" in applicable material specifications. Materials designated "tube" or "tubing" in the specifications are treated as pipe when intended for pressure service. This term includes piping and associated piping which is utilized in the operation of an AST, or emanating from or feeding ASTs or transfers oil from or to an AST (e.g., dispensing systems, including airport hydrant fueling systems, supply systems, gauging systems, auxiliary systems, etc.). This term does not include line pipe and breakout tanks of an interstate pipeline regulated under the federal Accountable Pipeline Safety and Partnership Act of 1996 (49 USC § 60101 et seq.).

"Pipeline" means all new and existing pipe, rights of way, and any equipment, facility, or building used in the transportation of oil, including, but not limited to, line pipe, valves, and other appurtenances connected to line pipe; pumping units; fabricated assemblies associated with pumping units; metering and delivery stations and fabricated assemblies therein; and breakout tanks.

"Release prevention barrier (RPB)" means a nonearthen barrier that is impermeable; is composed of material compatible with oil stored in the AST; meets proper engineering strength and elasticity standards; and functions to prevent the discharge of stored oil to state lands, waters and storm drains. It must contain and channel any leaked oil in a manner that provides for early release detection through the required daily and weekly inspections.

"State waters" means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction.

"Storage capacity" means the total capacity of an AST or a container, whether filled in whole or in part with oil, a mixture of oil, or mixtures of oil with nonhazardous substances, or empty. An AST that has been permanently closed in accordance with this chapter has no storage capacity.

"Tank" means a device designed to contain an accumulation of oil and constructed of nonearthen materials, such as concrete, steel, or plastic, that provides structural support. This term does not include flow-through process tanks as defined in 40 CFR Part 280.

"Tank vessel" means any vessel used in the transportation of oil as bulk cargo.

"Upgrade" means an alteration of the performance, design, equipment or appurtenances of an AST or facility to meet a higher, new, or current standard.

"Vaulted tank" means any tank situated upon or above the surface of the floor in an underground area (such as an underground room, basement, cellar, mine-working, drift, shaft, tunnel or vault) providing enough space for physical inspection of the exterior of the tank.

"Vehicle" means any motor vehicle, rolling stock, or other artificial contrivance for transport whether self-propelled or otherwise, except vessels.

"Vessel" includes every description of watercraft or other contrivance used as a means of transporting on water, whether self-propelled or otherwise, and shall include barges and tugs.

9VAC25-91-20. Applicability.

A. The operator shall comply with all applicable requirements pursuant to this chapter. The operator as defined in this chapter can be more than one person and each operator shares joint responsibility for compliance.

B. The requirements of this chapter ~~may vary in their applicability to any given AST or facility depending on the part in which the requirement appears. The applicability of Parts II, III, IV, and V are differentiated~~ apply as follows:

1. The provisions of Part II (9VAC25-91-100 et seq., Registration, Notification and Closure Requirements) of this chapter apply to: (i) an individual AST located within the Commonwealth of Virginia with an aboveground storage capacity greater than 660 gallons of oil, unless otherwise specified within this chapter; and (ii) all facilities in the Commonwealth of Virginia with an aggregate aboveground storage capacity greater than 1,320 gallons of oil, unless otherwise specified within this chapter. Storage of oil that is excluded from regulation in 9VAC25-91-30 A is not included when calculating the aggregate aboveground storage capacity.

2. The provisions of Part III (9VAC25-91-130 et seq., Pollution Prevention Requirements) of this chapter apply to: (i) an individual AST located within the Commonwealth of Virginia with an aboveground storage capacity of 25,000 gallons or greater of oil, unless otherwise specified within this chapter; and (ii) all facilities in the Commonwealth of Virginia with an aggregate aboveground storage capacity of 25,000 gallons or greater of oil, unless otherwise specified within this chapter. Storage of oil that is excluded from regulation in 9VAC25-91-30 A is not included when calculating the aggregate aboveground storage capacity.

3. The provisions of Part IV (9VAC25-91-170, Oil Discharge Contingency Plan (ODCP) Requirements) of this chapter apply to: (i) an individual AST located within the Commonwealth of Virginia with an aboveground storage capacity of 25,000 gallons or greater of oil, unless otherwise specified within this chapter; and (ii) all facilities in the Commonwealth of Virginia with an aggregate aboveground storage capacity of 25,000 gallons or greater of oil, unless otherwise specified within this chapter. Storage of oil that is excluded from regulation in 9VAC25-91-30 A is not included when calculating the aggregate aboveground storage capacity.

4. The provisions of Part V (9VAC25-91-180 et seq., Groundwater Characterization Study (GCS) and GCS Well Monitoring Requirements) of this chapter apply to: (i) an individual AST located within the Commonwealth of Virginia with an aboveground storage capacity of one million gallons or greater of oil, unless otherwise specified within this regulation; and (ii) all facilities in the Commonwealth of Virginia with an aggregate aboveground storage capacity of one million gallons or greater of oil, unless otherwise specified within this chapter. Storage of oil that is excluded from regulation in 9VAC25-91-30 A is not included when calculating the aggregate aboveground storage capacity.

9VAC25-91-30. Exclusions.

A. The requirements of this chapter do not apply to:

1. Vessels;
2. Licensed motor vehicles, unless used solely for the storage of oil;
3. An AST with a storage capacity of 660 gallons or less of oil;
4. An AST containing petroleum, including crude oil or any fraction thereof, which is liquid at standard temperature and pressure (60°F at 14.7 pounds per square inch absolute) subject to and specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of § 101(14) of the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 USC § 9601 et seq.);
5. A wastewater treatment tank system that is part of a wastewater treatment facility regulated under § 402 or § 307(b) of the federal Clean Water Act (33 USC § 1251 et seq.);
6. An AST that is regulated by the Department of Mines, Minerals and Energy under Chapter 22.1 (§ 45.1-361.1 et seq.) of Title 45.1 of the Code of Virginia;
7. An AST used for the storage of products that are regulated pursuant to the

federal Food, Drug, and Cosmetic Act (21 USC § 301 et seq.);

8. An AST that is used to store hazardous wastes listed or identified under Subtitle C of the Resource Conservation and Recovery Act (RCRA) (Solid Waste Disposal Act) (42 USC § 6901 et seq.), or a mixture of such hazardous wastes and other regulated substances;

9. An AST that is used to store propane gas, butane gas or other liquid petroleum gases;

10. An AST used to store nonpetroleum hydrocarbon-based animal and vegetable oils;

11. A liquid trap or associated gathering lines directly related to oil or gas production, or gathering operations;

12. A surface impoundment, pit, pond, or lagoon;

13. A stormwater or wastewater collection system;

14. Equipment or machinery that contains oil for operational purposes, including but not limited to lubricating systems, hydraulic systems, and heat transfer systems;

15. An AST that forms an integral part (cannot be readily detached or removed) of the equipment or machinery and the contents of the AST are solely used by the attached equipment or machinery (e.g., fuel tank affixed into the frame of an emergency generator);

~~15-16.~~ An AST used to contain oil for less than 120 days when: (i) used in connection with activities related to the containment and cleanup of oil; (ii) used by a federal, state or local entity in responding to an emergency; emergency including response related drills; or (iii) used temporarily on-site to replace permanent capacity storage;

~~16-17.~~ Oil-filled electrical equipment, including, but not limited to, transformers, circuit breakers or capacitors;

~~17-18.~~ A flow-through process tank;

~~18-19.~~ Oily water separators;

~~19-20.~~ An AST containing dredge spoils;

~~20-21.~~ An AST located on a farm or residence used for storing motor fuel for noncommercial purposes with an aggregate a storage capacity of 1,100 gallons or less; or

~~21-22.~~ Pipes or piping beyond the first valve from the AST that connects an AST with production process tanks or production process equipment.

B. In addition to the ~~complete~~ exclusions listed in subsection A of this section, the following are ~~partially~~ excluded from ~~this chapter in that they need not comply with~~ the requirements contained in Part III (9VAC25-91-130 et seq., Pollution Prevention Requirements) of this chapter:

1. An AST with a capacity of 5,000 gallons or less used for storing heating oil for consumptive use on the premises where stored;

2. An AST storing asphalt and asphalt compounds which are not liquid at standard conditions of temperature and pressure (60°F at 14.7 pounds per square inch absolute); and

3. Line pipe and breakout tanks of an interstate pipeline regulated under the federal Accountable Pipeline Safety and Partnership Act of 1996 (49 USC § 60101 et seq.).

C. ~~In addition to the exclusions listed in subsections A and B of this section;~~ asphalt Asphalt and asphalt compounds which are not liquid at standard conditions of temperature and pressure (60°F at 14.7 pounds per square inch absolute) are excluded ~~for the purposes of from~~ any requirement to install groundwater monitoring wells or groundwater protection devices or to conduct

groundwater characterization studies under Part IV (9VAC25-91-170, Oil Discharge Contingency Plan (ODCP) Requirements) and Part V (9VAC25-91-180 et seq., Groundwater Characterization Study (GCS) and GCS Well Monitoring Requirements) of this chapter.

9VAC25-91-40. Compliance dates.

A. Every operator shall comply with this chapter on its effective date unless a later date is otherwise specified.

B. Operators of facilities existing on June 24, 1998 and exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., facilities not engaged in the resale of oil) having an aboveground storage capacity of 25,000 gallons or greater of oil shall ~~comply~~ must have complied with Part III (9VAC25-91-130 et seq., Pollution Prevention Requirements) of this chapter within 120 days after the effective date of this chapter on or before October 22, 1998 unless otherwise specified in this chapter. If compliance with Part III of this chapter necessitates extensive upgrades to the existing facility design, these exempted operators ~~may submit~~ shall have submitted a proposed extended compliance schedule and supporting explanation to the board no later than ~~90 days after the effective date of this chapter~~ September 22, 1998 or such date approved by the board. ~~The board may approve an extended compliance schedule where the circumstances so warrant.~~

C. Operators of ~~existing~~ ASTs and facilities existing prior to June 24, 1998 and previously registered in accordance with the requirements of § 62.1-44.34:19.1 of the Code of Virginia shall not have to resubmit the registration form until five years from the date of the initial registration unless title to that AST or facility is transferred (i.e., change of ownership) or the AST is converted or brought back into use after permanent closure, whichever occurs first.

D. Operators of facilities subject to Part IV (9VAC25-91-170, Oil Discharge Contingency Plan (ODCP) Requirements) of this chapter that ~~are were~~ brought into use on or after the effective date of this chapter June 24, 1998 shall submit a complete application meeting all applicable requirements of this chapter no later than 90 days prior to commencement of operations.

1. The operator must receive approval of the ODCP by ~~DEQ~~ the board prior to commencement of facility operations.

2. The operators of facilities that have previously met the provisions of § 62.1-44.34:15 of the Code of Virginia for ODCP submittal shall not be required to resubmit the ODCP until 90 days prior to the date that plan's approval expires. Ninety days prior to the expiration of approval of the ODCP, the facility operator shall submit an updated plan or certification of renewal of an existing plan according to 9VAC25-91-170 F.

E. ~~As of July 1, 1997, an~~ An operator having obtained approval of the ODCP shall operate, maintain, monitor, and keep records pertaining to 9VAC25-91-170 A 18 of Part IV (9VAC25-91-170, Oil Discharge Contingency Plan (ODCP) Requirements) of this chapter and under the provisions of Part III (9VAC25-91-130 et seq., Pollution Prevention Requirements) of this chapter.

9VAC25-91-50. Statement of purpose.

The purpose of this chapter is to: (i) establish requirements for registration of facilities and individual ASTs located within the Commonwealth; (ii) provide the board with the information necessary to identify and inventory facilities with an aggregate storage capacity of greater than 1,320 gallons of oil or an individual ASTs AST with a storage capacity of greater than 660 gallons of oil; (iii) develop standards and procedures for operators of facilities with an aggregate aboveground storage capacity of 25,000 gallons or greater of oil relating to the prevention of pollution from new and existing aboveground storage tanks; (iv) provide requirements for the development of facility oil discharge contingency plans for facilities with an aggregate aboveground storage capacity of 25,000 gallons or greater of oil that will ensure that the applicant can take such steps as are necessary to protect environmentally sensitive areas, to respond to the threat of an oil discharge, and to contain, clean up and mitigate an oil discharge within the shortest feasible time, where plans must address concerns for the effect of oil

discharges on the environment as well as considerations of public health and safety; and (v) provide requirements for facilities and individual ASTs with an aggregate aboveground storage capacity of one million gallons or greater of oil to conduct a groundwater characterization study (GCS) within the geographic boundaries of a facility; to submit the GCS as part of the oil discharge contingency plan; to conduct a monthly gauging and inspection of GCS monitoring wells, monitoring of well headspace and sampling and laboratory analysis of GCS monitoring wells; and to gather all observations and data maintained at the facility and compile and submit them as an annual report to the ~~board.~~department.

9VAC25-91-60. Administrative fees.

A. Fees are assessed for review of oil discharge contingency plans (ODCP), ~~and for registration of an AST or a facility according to the schedules contained in subsections B and C of this section. A registration form or an~~ An application for review of a contingency plan will not be accepted unless the required fee has been received by the department.

1. Fees shall be paid in United States currency by check, draft, or postal money order made payable to the Treasurer of Virginia. When the department is able to accept electronic payments, payments may be submitted electronically.

2. The fee, together with the ~~form or application and oil discharge contingency plan~~, shall be sent to the department at the following mailing address:

Department of Environmental Quality
Office of Financial Management
P.O. Box ~~40450-1104~~
Richmond, VA ~~23240~~ 23218

3. Notifications and correspondence for which a fee is not applicable should be mailed to the department as specified in 9VAC25-91-70.

~~B. Facility and AST registration:~~

~~1. Registration fees shall be submitted for the following:~~

- ~~a. Initial registration;~~
- ~~b. New installations;~~
- ~~c. Conversion (i.e., UST to an AST, storing a nonoil to an oil product, etc.);~~
- ~~d. AST brought back into use after permanent closure;~~
- ~~e. Registration renewal (every five years); or~~
- ~~f. When title to a facility or AST is transferred (change of ownership):~~

~~2. Registration fees are as follows:~~

- ~~a. An individual AST (new, existing, replaced or brought back into use after permanent closure) = \$25;~~
- ~~b. One facility with one AST = \$25;~~
- ~~c. One facility with two or more ASTs = \$50;~~
- ~~d. Two facilities with one AST at each facility = \$50;~~
- ~~e. Two facilities with one AST at the first facility and two or more at the other = \$75;~~
- ~~f. Two or more facilities with two or more ASTs each = \$100;~~
- ~~g. Three facilities with one AST each = \$75; or~~
- ~~h. Three facilities with two or more ASTs at the first facility and one AST at each other facility = \$100;~~
- ~~3. An operator of an AST subject to the registration requirements of this chapter~~

shall submit a fee of \$25 to the board for each such AST up to a maximum of \$50 per facility. An operator of a single facility shall submit a maximum of \$50 for the facility and all ASTs. An operator of multiple facilities shall submit a maximum fee of \$100 to the board to register all of their facilities and ASTs.

4. Registration forms will not be accepted by the board as complete unless the applicable fee has been paid. No fee is required for a "notification" of an AST replacement (i.e., relocation of existing AST), upgrade, repair, or closure.

G.B. ODCP application.

1. ODCP application fees are as follows:

- a. For a facility with an aggregate aboveground maximum storage or handling capacity from 25,000 gallons up to and including 100,000 gallons of oil the fee is \$718;
 - b. For a facility with an aggregate aboveground maximum storage or handling capacity ~~from 100,001~~ greater than 100,000 gallons up to one million gallons of oil the fee is \$2,155;
 - c. For a facility with an aggregate aboveground maximum storage or handling capacity of one million gallons or greater of oil the fee is \$3,353; or
 - d. For a pipeline, the ODCP application fee shall be based on the average daily throughput of oil. Once that volume is determined, the ODCP application fee will be calculated per subdivisions a, b and c of this subdivision.
2. The fee for approval of a contingency plan encompassing more than one facility as described in 9VAC25-91-170 D shall be based on the aggregate aboveground storage capacity of the facilities.
3. Fees shall only be paid upon initial submittal of an oil discharge contingency plan by an operator. Renewals, additions, deletions or changes to the plan are not subject to the administrative fee.
4. Application fees are refundable upon receipt of a written request to withdraw the ODCP application provided the request is received no later than 30 days after submittal and prior to the department's review of the contingency plan.
5. Overpayments of application fees are refundable upon written request.

9VAC25-91-70. Notices Correspondence to the Department of Environmental Quality (DEQ).

A. Correspondence that contains fees must be submitted to the department as specified in 9VAC25-91-60 A.

B. All other written correspondence and notifications to the Department of Environmental Quality department related to the requirements of this chapter, with the exceptions of (i) the correspondence which contains fees and therefore must be paid directly to the Treasurer of Virginia as specified in 9VAC25-91-60 A and (ii) variance petitions as specified in 9VAC25-91-160 shall be addressed to the cognizant DEQ regional office; office servicing the facility that is the subject of the correspondence. A list of regional offices and their addresses are available from the central office at the following address:

Mailing Address:

Department of Environmental Quality
Office of Spill Response and Remediation
P.O. Box ~~40009-1105~~
Richmond, VA ~~23240-0009~~ 23218

Street Address:

Department of Environmental Quality
Office of Spill Response and Remediation

629 E. Main Street
Richmond, VA 23219

9VAC25-91-90. Evaluation of chapter. (Repealed.)

~~A. Within three years after the effective date of this chapter, the department shall perform an analysis on this chapter and provide the board with a report on the results. The analysis shall include (i) the purpose and need for the chapter; (ii) alternatives which would achieve the stated purpose of this chapter in a less burdensome and less intrusive manner; (iii) an assessment of the effectiveness of this chapter; (iv) the results of a review of current state and federal statutory and regulatory requirements, including identification and justification of requirements of this chapter which are more stringent than federal requirements; and (v) the results of a review as to whether this chapter is clearly written and easily understandable by affected entities.~~

~~B. Upon review of the department's analysis, the board shall confirm the need to (i) continue this chapter without amendments, (ii) repeal this chapter or (iii) amend this chapter. If the board's decision is to repeal or amend this chapter, the board shall authorize the department to initiate the applicable regulatory process to carry out the decision of the board.~~

Part II
Registration, Notification and Closure Requirements

9VAC25-91-100. Registration requirements.

A. Section 62.1-44.34:19.1 of the Code of Virginia requires an operator of a facility located within the Commonwealth with an aggregate aboveground storage capacity of more than 1,320 gallons of oil or an operator of an individual AST located within the Commonwealth with a storage capacity of more than 660 gallons of oil to register such facility or AST with the board and with the local director or coordinator of emergency services unless otherwise specified within this chapter.

B. Although the term "operator" includes a variety of persons who may share joint responsibility for compliance with this chapter, in fixing responsibility for compliance with the registration requirements, ~~DEQ~~ the board shall look first to the owner or a duly authorized representative of the facility or AST.

C. A duly authorized representative may submit the registration on the owner's behalf.

1. A person is a duly authorized representative only if:

a. The authorization is made in writing by the owner and indicates that the representative has signatory authority for the registration;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity (e.g., the plant manager, the operator of a facility or an AST, the superintendent, or a position of equivalent responsibility), or specifies an individual or a position having overall responsibility for environmental matters for the facility or company. A duly authorized representative thus may be either a named individual or any individual occupying a named position; and

c. The written authorization is submitted to the department along with the registration form.

2. Changes to authorization. If an authorization previously submitted is no longer accurate because a different individual or position has assumed responsibility for the overall operation of the facility or for environmental matters, a new authorization satisfying the requirements shall be submitted to the department prior to or together with any reports or information signed by that duly authorized representative.

3. Certification. Any person signing a registration document shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

D. The owner or a duly authorized representative of a new facility or AST, a converted facility or AST, or a facility or AST brought back into use after permanent closure or a facility or AST whose title is transferred (change of ownership) shall register such facility or AST with the board and local director or coordinator of emergency services within 30 days after being brought into ~~use~~ use or when title is transferred.

E. Registration shall include the following information and other information that may be required if approved by the board:

1. Facility and AST owner and operator information (e.g., name, address, and phone numbers);
2. Facility information (e.g., name, type, address, contact person and phone numbers, and aggregate storage capacity);
3. Tank and piping information (e.g., storage capacity, product stored, type of design and construction standards);
4. Other information that may be reasonably requested by the board; and
5. Owner certification of information.

F. The owner or a duly authorized representative of the facility or AST shall renew the registration required by this section every five years or whenever title to the facility or AST is transferred (change of ownership), whichever occurs first.

G. A facility or AST installed after ~~the effective date of this chapter, June 24, 1998,~~ including an AST or facility operated by the federal government, shall not be registered without either (i) a review by the department of the permits, inspections, and certification of use required in accordance with the provisions of the Uniform Statewide Building Code, ~~Code the BOCA® National Building Code and NFPA Code~~ and obtained by the owner or a duly authorized representative from the local code officials or their designee or (ii) an inspection by the department. In the case of a regulated AST operated by the Commonwealth, the Department of General Services shall function as the local code official in accordance with § 36-98.1 of the Code of Virginia.

9VAC25-91-120. Aboveground storage tank closure.

A. After ~~the effective date of this chapter, June 24, 1998,~~ a facility or AST, including a facility or AST operated by the federal government, shall not be permanently closed without being registered ~~and the fee paid~~ and either (i) having a review performed by the department of the permits and inspections required in accordance with the provisions of the Uniform Statewide Building Code, ~~Code the BOCA® National Building Code, and NFPA Code~~ obtained by the owner or a duly authorized representative from the local code official or his designee or (ii) being inspected by the department.

1. For inspections by the department (e.g., where a permit is not issued by the local code official or his designee), at least 14 days notice to the department is required prior to the commencement of closure operations. Notice shall be made by the owner or a duly authorized representative.
2. In the case of a regulated AST operated by the Commonwealth, the Department of General Services shall function as the local code official in accordance with § 36-98.1 of the Code of Virginia.
3. If the closure is in response to containment and cleanup actions that necessitate AST removal, the owner or a duly authorized representative of the facility or AST shall immediately notify the local code official and the department.

B. Closure operations shall be reported to the department by the owner or a duly authorized representative within 30 days after the permanent closure operation is completed.

C. Closure operations shall include the following:

1. Removal of all liquids, sludges, and vapors from the AST and associated piping. All wastes removed shall be disposed of in accordance with all applicable state and federal requirements.

2. For tanks being closed in place, the tank shall be rendered vapor free. Provisions must be made for adequate ventilation to ensure that the tank remains vapor free. Vent lines shall remain open and maintained in accordance with the applicable codes. All access openings shall be secured (normally with spacers to assist ventilation). The AST shall be secured against tampering and flooding. The name of the product last stored, the date of permanent closure and PERMANENTLY CLOSED shall be stenciled in a readily visible location on the AST. Piping shall be disconnected. All pipes being closed in place shall be vapor free and capped or blind flanged.

3. An assessment of the AST site shall be conducted prior to completion of permanent closure operations.

a. In conducting the assessment, the owner or a duly authorized representative shall sample and test for the presence of petroleum hydrocarbons at the AST site in any area where contamination is likely to have occurred. These locations shall be subject to the review of the board. Sampling and testing shall be conducted in accordance with established EPA-approved analytical methods or other methods approved by the board.

(1) The owner or a duly authorized representative shall submit copies of the laboratory results, a description of the area sampled, a photograph of the site indicating sampled areas, and a site map indicating the location of the closed AST and associated piping as attachments to the closure form.

(2) If contaminated soils, contaminated groundwater, free product as a liquid or vapor, or other evidence of a release is discovered, the owner or a duly authorized representative shall immediately notify the board and conduct the cleanup in accordance with ~~department~~ board requirements.

b. The ~~department board~~ may consider an alternative to the soil sampling requirements of this subsection if the owner or a duly authorized representative of the AST demonstrates to the board's satisfaction that:

(1) There is no evidence of present or past contamination by providing records of monthly leak detection monitoring for the previous 12 months; and

(2) The facility or AST has operated an approved or approvable leak detection system.

4. A closure inspection conducted by either the department or the local building official, as discussed in subsection A of this section.

D. When deemed necessary by the board, the owner or a duly authorized representative of a facility or an AST that was permanently closed prior to ~~the effective date of this chapter~~ June 24, 1998, shall assess the site and close the AST in accordance with the requirements of this section.

E. The owner or a duly authorized representative shall maintain all records relating to compliance with this section for a period of not less than five years from the date the board receives notice of the completed closure. These records shall be made available to the board upon request.

Part III

Pollution Prevention Requirements

9VAC25-91-130. Pollution prevention standards and procedures.

A. Pollution prevention standards and procedures for facilities are listed in this section. Aboveground storage tanks with an aggregate capacity of one million

gallons or more shall comply with the requirements of 9VAC25-91-130 B and 9VAC25-91-130 C.

B. Requirements for aboveground storage tanks at facilities for 25,000 gallons or more

Section 62.1-44.34:15.1 of the Code of Virginia provides the following requirements for existing aboveground storage tanks at a facility with an aggregate aboveground storage capacity of one million gallons equal to or greater than 25,000 gallons of oil or for an existing individual aboveground storage tank with a storage capacity of one million gallons or equal to or greater of oil, than 25,000 gallons of oil, unless otherwise exempted.

1. Inventory control and testing for significant variations.

a. The following aboveground storage tanks shall not be subject to inventory control and testing for significant variations:

(1) Aboveground storage tanks totally off ground with all associated piping off ground;

(2) Aboveground storage tanks with a capacity of 5,000 gallons or less located within a building or structure designed to fully contain a discharge of oil; and

(3) Aboveground storage tanks containing No. 5 or No. 6 oil for consumption on the premises where stored.

b. Each operator shall institute inventory control procedures capable of detecting a significant variation of inventory. A significant variation shall be considered a variation in excess of 1.0% of the storage capacity of each individual AST. ~~For a refinery, a significant variation of inventory shall be considered a loss in excess of 1.0% by weight of the difference between the refinery's input and output.~~ Reconciliations of inventory measurements shall be conducted monthly. If the a significant variation persists for two consecutive reconciliation periods, the operator shall conduct an investigation to determine the cause of the variation, variation and reconcile physical measurements to 60°F at 14.7 pounds per square inch absolute. This investigation shall be completed within five working days of the end of the second reconciliation period. If this investigation does not reveal the cause of the inventory variation, the operator shall notify the board and the local director or coordinator of emergency services and shall conduct additional testing to determine the cause of the inventory variation. The testing method, schedule, and results of this additional testing shall be submitted to the board for review. ~~For a refinery, a significant variation of inventory shall be considered a loss in excess of 1.0% by weight of the difference between the refinery's input and output of oil.~~

c. Inventory records shall be kept of incoming and outgoing volumes of oil from each tank. All tanks shall be gauged no less frequently than once every 14 days and on each day of normal operation. ~~Physical measurements shall be reconciled to 60°F at 14.7 pounds per square inch absolute. For a refinery, the operator shall calculate the input and output of oil at the refinery on a daily basis. The operator shall reconcile daily inventory records with the inventory measurements conducted monthly.~~

2. Formal inspections:

a. Each AST shall undergo formal external and internal tank inspections. ~~The initial formal internal and external inspections for an existing AST shall be completed on or before June 30, 1998, unless otherwise specified within this chapter.~~

(1) All newly installed ASTs shall have initial formal inspections within five years after the date of installation.

(2) Operators of facilities exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall complete the initial formal inspections within five years of the effective date of this chapter.

(3) An AST with a storage capacity of less than 12,000 gallons shall not be subject to the formal internal inspection unless the integrity of the AST is in question and an inspection is deemed necessary by the board.

~~b. Inspections shall be conducted in accordance with the provisions of API Standard 653 or procedure approved by the board. If construction practices allow external access to the tank bottom, a formal external inspection utilizing accepted methods of nondestructive testing or procedure approved by the board may be allowed in lieu of the internal inspection. An AST with a release prevention barrier or liner installed shall be internally inspected in accordance with the applicable provisions of API Standard 653 or API Recommended Practice 652 or procedure accepted by the board.~~

~~c. An API Standard 653 inspection conducted between January 1, 1991, and the effective date of this chapter may be accepted by the board if the operator provides supporting documentation to the board for review and approval.~~

~~3. Formal reinspections.~~

~~a. Each AST shall undergo an external reinspection every five years in accordance with the provisions of API Standard 653 after the initial formal external inspection has been conducted.~~

~~b. Each AST with a storage capacity of 12,000 gallons of oil or greater shall undergo an internal reinspection in accordance with the provisions of API Standard 653 every 10 years after the initial formal internal inspection has been conducted.~~

~~(1) The board may require the internal reinspection sooner than 10 years if there is an indication that the corrosion rate established by the initial internal inspection or a subsequent reinspection has increased.~~

~~(2) The internal reinspection period may be extended beyond 10 years if the operator can demonstrate to the board that an extension of the reinspection period is warranted. The operator shall provide supporting documentation to the board for review and approval at least six months prior to the date the reinspection is due.~~

~~c. An AST with a storage capacity of less than 12,000 gallons shall not be subject to the formal internal reinspection unless the integrity of the AST is in question and an inspection is deemed necessary by the board.~~

~~4.2. Secondary containment. Each secondary containment dike or berm shall be maintained and evaluated or certified with respect to its compliance with the applicable requirements of 40 CFR Part 112 (1997), NFPA 30, and 29 CFR 1910.106. The operator shall have this evaluation or certification performed by a professional engineer or person approved by the board on or before June 30, 1998, and every 10 years thereafter, unless otherwise exempted.~~

~~a. Operators of facilities exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall have this evaluation completed within five years after the effective date of this chapter and every 10 years thereafter.~~

~~b. Operators of a newly installed AST shall have this evaluation completed prior to being placed into service and every 10 years thereafter.~~

~~a. The operator shall have and maintain secondary containment or another method approved by the board for each AST. The containment structure must be capable of containing oil and shall be constructed in accordance with 40 CFR Part 112 so that any discharge from the AST will not escape the containment before cleanup occurs. The operator shall have each secondary containment or approved method evaluated and certified to be in compliance with the applicable requirements of 40 CFR Part 112, the Uniform Statewide Building Code and its referenced model codes and standards, and 29 CFR Part 1910.106. The operator of a facility existing on June 24, 1998 shall have had this evaluation or certification performed by a professional engineer or person approved by the board on or before June 30, 1998, and every 10 years thereafter, unless otherwise exempted.~~

~~b. If the secondary containment cannot be certified to be in compliance with the applicable requirements of 40 CFR Part 112, Uniform Statewide Building Code and its referenced model codes and standards, and 29 CFR Part 1910.106, the operator must upgrade, repair, or replace the secondary containment to meet the~~

applicable requirements listed in paragraph a of this subsection unless the board accepts the certification with qualifications.

c. The operator of a facility shall have the evaluation and certification performed every 10 years by a professional engineer (PE) licensed in the Commonwealth of Virginia or other state having reciprocity with Virginia or by a person approved by the board unless otherwise exempted.

d. The Professional Engineer shall not certify the secondary containment until all of the applicable requirements of 40 CFR Part 112, the Uniform Statewide Building Code and its referenced model codes and standards, and 29 CFR Part 1910.106 have been met. In the event the professional engineer certifies the secondary containment with qualifications, such qualifications will be subject to review and approval by the board. If the certification contains qualifications that may impact the ability of the secondary containment to contain a discharge of oil as required by 9VAC25-91-130 B 2 a, the deficiencies must be corrected and the secondary containment must be reevaluated and recertified by a professional engineer.

e. At a minimum, the certification statement for the secondary containment must contain the following statement "Based on my evaluation, I hereby certify that each secondary containment structure for [insert the facility name and tank identification information] is in compliance with the applicable requirements of 40 CFR 112, the Uniform Statewide Building Code and its referenced model codes and standards, and 29 CFR 1910.106."

f. The certification must be signed and sealed by a professional engineer, licensed in the Commonwealth of Virginia or other state having reciprocity, or by a person approved by the board.

g. Operators of facilities existing on June 24, 1998 and exempted under §62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall have had this evaluation completed on or before June 24, 2003 and every 10 years thereafter.

h. Operators of a newly installed AST shall have this evaluation completed prior to being placed into service and every 10 years thereafter.

5. 3. Safe fill and shutdown procedures.

a. Each operator shall institute and maintain records of safe fill, shutdown and transfer procedures, or equivalent measures ~~established~~ approved by the board, that will ensure that spills resulting from tank overfills or other product transfer operations do not occur.

(1) All receipts of oil shall be authorized by the operator or facility personnel trained by the operator who shall ensure the volume available in the tank is greater than the volume of oil to be transferred to the tank before the transfer operation commences. The operator shall ensure the transfer operation is monitored continually, either by manual or automatic means, until complete. The operator shall ensure that all tank fill valves not in use are secured and that only the tank designated is receiving oil.

(2) ~~If unattended during transfer operations, the AST shall be equipped with a high level alarm or other appropriate mechanism approved by the board that will immediately alert the operator to prevent an overflow event. Activation of the high level alarm or other appropriate mechanism shall initiate an immediate and controlled emergency shutdown of the transfer, either by manual or automatic means. Each operator shall include this emergency shutdown procedure in the facility records and shall ensure that all facility personnel involved in the transfer operation are trained in this procedure. The alarm shall consist of a visual and audible device capable of alerting the operator, both by sight and hearing, to prevent an overflow situation. If the operator is in a control station, this alarm shall cause a warning light and audible signal in that station to activate. In addition, this system shall alarm on failure, malfunction or power loss. This high level alarm shall be tested prior to each receipt of oil. Records of testing shall be maintained at the facility.~~

b. All oil transfer areas where filling connections are made with vehicles shall be equipped with a spill containment system capable of containing and collecting

those spills and overfills. The containment system shall be designed to hold at least the capacity as required by 40 CFR Part 112, (1997) (e.g., the maximum capacity of any single compartment of a vehicle loaded or unloaded in the transfer area):

c. If installed, an automatic shutdown system utilized during transfer of oil shall include the capability to direct the flow of oil to another tank capable of receiving the transferred oil or the capability to shut down the pumping or transfer system. This automatic shutdown system shall be tested prior to each receipt of oil and records of testing shall be maintained at the facility.

d. All ASTs shall be equipped with a gauge that is readily visible and indicates the level of oil or quantity of oil in the tank. In addition, the storage capacity, product stored and tank identification number shall be clearly marked on the tank at the location of the gauge. These gauges shall be calibrated annually.

~~6: 4. Cathodic protection of piping and pressure~~ Pressure testing of piping.

~~a. The requirement for cathodic protection of piping shall apply to buried piping only. Cathodic protection shall be installed and maintained in accordance with the following applicable publications: API 1632, NFPA 30, NACE 0169, or NACE 0285. All piping above ground shall be protected from corrosion using methods and procedures referenced in NFPA 30, Chapter 2, Section 2-4.3 or a procedure approved by the board. Piping that passes through the wall of the containment berm or dike or under road crossings shall be protected from corrosion and damage using practices recommended in the publications listed in this subdivision.~~

~~b. All piping shall be pressure tested as specified in this subsection or using an equivalent method or measure approved by the board at intervals not to exceed five years. The operator of an existing a facility or AST existing on June 24, 1998 shall have complete completed the initial test on or before June 30, 1998, except operators of existing facilities or ASTs for which compliance was exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil). These excepted operators shall have complete completed the initial test within five years after the effective date of this chapter. on or before June 24, 2003. All newly installed or repaired piping shall be tested before being placed into service.~~

(1) ~~a.~~ A pressure test may be a hydrostatic test at 150% maximum allowable working pressure (MAWP) or an inert gas test at 110% MAWP.

(2) ~~b.~~ A test conducted and certified by an API authorized piping inspector to be in conformity with the API 570 Piping Inspection Code is deemed an equivalent method of testing approved by the board.

(3) ~~c.~~ The board may consider on a case-by-case basis requests for approval of other equivalent methods or measures which conform to industry recommended practices, standards and codes. The operator shall submit a request for approval of a proposed equivalent method or measure to the board as specified in 9VAC25-91-160.

~~7: 5. Visual daily inspection and weekly inspections.~~

a. The operator or a duly authorized representative shall conduct a daily visual inspection for each day ~~of in which~~ normal operation occurs, ~~but no less frequently than once every fourteen days~~ in the areas of the facility where this chapter applies. The facility person conducting the inspection shall document completion of this inspection by making and signing an appropriate notation in the facility records. This visual inspection shall include the following:

(1) A complete walk-through of the facility property in the areas where this chapter applies to ensure that no hazardous conditions exist;

(2) An inspection of ground surface for signs of leakage, spillage, or stained or discolored soils;

(3) A check of the berm or dike area for excessive accumulation of water and to ensure the dike or berm manual drain valves are secured;

(4) A visual inspection of the exterior tank shell to look for signs of leakage or

damage; and

(5) An evaluation of the condition of the aboveground storage tank and appurtenances.

b. The operator or a duly authorized representative shall conduct a weekly inspection each week in which normal operation occurs, but no less frequently than once every fourteen days, of the facility in the areas where this chapter applies, using a checklist that contains at least the items found in ~~the weekly inspection checklist subdivision of this section~~; 9VAC25-91-130 B 5 c. The checklist is not inclusive of all safety or maintenance procedures but is intended to provide guidance to the requirements within this chapter. The weekly checklist shall be maintained at the facility and provided to the board upon request. This checklist shall be signed and dated by the facility person or persons conducting the inspection and shall become part of the facility record.

(1) The operator of a new AST/facility shall develop the checklist within 90 days after the date of installation.

(2) The operator of each facility existing on June 24, 1998 and exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall ~~develop~~ have developed the checklist ~~within 90 days after the effective date of this chapter~~; by September 28, 1998.

(3) Operators of facilities existing on June 24, 1998 and not exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) and who have developed a checklist ~~within 90 days after June 30, 1998~~; by September 28, 1998 shall be deemed to be in compliance with this checklist requirement as of ~~the effective date of this chapter~~; June 24, 1998.

c. Sample weekly inspection checklist for aboveground storage tank systems:

- (1) Containment dike or berm in satisfactory condition.
- (2) Containment area free of excess standing water or oil.
- (3) Gate valves used for emptying containment areas secured.
- (4) Containment area/base of tank free of high grass, weeds, and debris.
- (5) Tank shell surface, including any peeling areas, welds, rivets/bolts, seams, and foundation, visually inspected for areas of rust and other deterioration.
- (6) Ground surface around tanks and containment structures and transfer areas checked for signs of leakage.
- (7) Leak detection equipment in satisfactory condition.
- (8) Separator or drainage tank in satisfactory condition.
- (9) Tank water bottom drawoffs not in use are secured.
- (10) Tank fill valves not in use are secured.
- (11) Valves inspected for signs of leakage or deterioration.
- (12) Inlet and outlet piping and flanges inspected for leakage.
- (13) All tank gauges have been inspected and are operational.

Signature of Inspector	Date	Time

d. The operator shall promptly remedy unsatisfactory facility and equipment conditions observed in the daily and weekly inspections. The operator shall make repairs, alterations and retrofits in accordance with API Standard 653, STI-SP001, industry standards, or methods approved by the board.

~~8. 6.~~ Training of individuals. To ensure proper training of individuals conducting inspections required by ~~subdivision 7 of this subsection~~; 9VAC25-91-130 B 5, the operator of a facility shall train personnel based on the following requirements:

a. Each facility operator shall establish a training program for those facility personnel conducting the daily visual and weekly inspections of the facility. Facility

records shall contain the basic information and procedures required by ~~subdivision 2 of this subsection.~~ 9VAC25-91-130 B 6 c. The required training may be conducted by the operator or by a third party. The training program established shall be maintained to reflect current conditions of the facility.

(1) The operator of a new facility shall establish the training program within six months after being brought into use.

(2) The operator of each facility exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall ~~establish~~ have established the training program ~~within six months after the effective date of this chapter, by December 24, 1998.~~

(3) Operators of facilities not exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) and who ~~have~~ developed a training program ~~within six months after June 30, 1993, by December 31, 1993~~ shall be deemed to be in compliance with this training program requirement as of ~~the effective date of this chapter,~~ June 24, 1998, so long as that program reflects current conditions of the facility.

b. The required training shall be conducted for facility personnel as applicable. Personnel not receiving this initial training and who will be conducting these inspections shall receive the training prior to conducting any inspection.

(1) The operator of a new facility shall conduct the personnel training within 12 months after being brought into use and prior to personnel conducting any inspection.

(2) The operator of each facility exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall ~~have~~ conduct ~~conducted~~ the personnel training ~~within 12 months after the effective date of this chapter, by June 24, 1999.~~

(3) Operators of facilities not exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) and who have conducted the personnel training ~~within 12 months after June 30, 1993, by June 30, 1994,~~ shall be deemed to be in compliance with this personnel training requirement as of ~~the effective date of this chapter,~~ June 24, 1998, so long as the training provided reflects current conditions of the facility and all inspections are current.

c. Training for personnel performing daily and weekly inspections shall address at a minimum:

(1) Basic information regarding occupational safety, hazard recognition, personnel protection, and facility operations;

(2) The procedures to be followed in conducting the daily visual and weekly facility inspections;

(3) The procedures to be followed upon recognition of a hazard or the potential for a hazard; and

(4) The procedure for evaluating the condition of the aboveground storage tank and appurtenances.

d. The operator of a facility shall train facility personnel upon any changes to the contents of the initial training program or every three years and shall document this training in the facility records.

~~e. All formal inspections and testing required by subdivision 2 of this subsection shall be conducted by a person certified to conduct the inspection or test. This certification shall be accomplished in accordance with the provisions of API Standard 650 and API Standard 653 or a procedure approved by the board. Proof of this certification shall be maintained in the facility records. The results of all tests and inspections required by subdivision 2 of this subsection shall be maintained at the facility or at a location approved by the board for the life of the tank, but for no less than five years.~~

9: 7 Leak detection. The operator shall operate, maintain, monitor and keep

records of the system established for early detection of a discharge to groundwater (i.e., a method of leak detection) as required by 9VAC25-91-170 A 18 and contained in the facility's approved ODCP. These activities shall be inspected and approved by the ~~department:~~ board.

B: C. Requirements for aboveground storage tanks at facilities for one million gallons or more

In addition to the requirements of 9VAC25-91-130 B, the following requirements apply to Section 62-1-44.34.15.1 of the Code of Virginia provides the following requirements for existing aboveground storage tanks at facilities with an aggregate aboveground storage capacity of less than one million gallons but equal to or more than 25,000 gallons of oil or for an existing individual aboveground storage tank with a storage capacity of less than one million but equal to or more than 25,000 gallons of oil, unless otherwise exempted.

1. Inventory control and testing for significant variations:

a. The following aboveground storage tanks shall not be subject to inventory control and testing for significant variations:

(1) Aboveground storage tanks totally off ground with all associated piping off ground;

(2) Aboveground storage tanks with a capacity of 5,000 gallons or less located within a building or structure designed to fully contain a discharge of oil; and

(3) Aboveground storage tanks containing No. 5 or No. 6 oil for consumption on the premises where stored.

b. Each operator shall institute inventory control procedures capable of detecting a significant variation of inventory. A significant variation shall be considered a variation in excess of 1.0% of the storage capacity of each individual AST. For a refinery, a significant variation of inventory shall be considered a loss in excess of 1.0% by weight of the difference between the refinery's input and output. Reconciliations of inventory measurements shall be conducted monthly. If the significant variation persists for two consecutive reconciliation periods, the operator shall conduct an investigation to determine the cause of the variation. This investigation shall be completed within five working days of the end of the second reconciliation period. If this investigation does not reveal the cause of the inventory variation, the operator shall notify the board and the local director or coordinator of emergency services and shall conduct additional testing to determine the cause for the inventory variation. The testing method, schedule, and results of this additional testing shall be submitted to the board for review.

c. Inventory records shall be kept of incoming and outgoing volumes of oil from each tank. All tanks shall be gauged no less frequently than once every 14 days and on each day of normal operation. Physical measurements shall be reconciled to 60°F at 14.7 pounds per square inch absolute.

2. Secondary containment. Each secondary containment dike or berm shall be maintained and evaluated or certified to be in compliance with the applicable requirements of 40 CFR Part 112 (1997), NFPA 30, and 29 CFR Part 1910.106. The operator shall have this evaluation or certification performed by a professional engineer or person approved by the board on or before June 30, 1998, and every 10 years thereafter, unless otherwise exempted:

a. Operators of facilities exempted under § 62-1-44.34.17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall have this evaluation completed within five years after the effective date of this chapter and every 10 years thereafter:

b. Operators of a newly installed AST shall have this evaluation completed prior to being placed into service and every 10 years thereafter:

3. Safe fill and shutdown procedures:

a. Each operator shall institute safe fill, shutdown and transfer procedures, or equivalent measures established by the board, that will ensure that spills resulting from tank overfills or other product transfer operations do not occur. All receipts of

oil shall be authorized by the operator or facility personnel trained by the operator who shall ensure the volume available in the tank is greater than the volume of oil to be transferred to the AST before the transfer operation commences. The operator shall ensure the transfer operation is monitored continually, either by manual or automatic means, until complete. The operator shall ensure that all tank fill valves not in use are secured and that only the tank designated is receiving oil.

b. All oil transfer areas where filling connections are made with vehicles shall be equipped with a spill containment system capable of containing and collecting those spills and overfills. The containment system shall be designed to hold at least the capacity as required by 40 CFR Part 112 (1997) (e.g., the maximum capacity of any single compartment of a vehicle loaded or unloaded in the transfer area).

c. If installed, an automatic shutdown system utilized during transfer of oil shall include the capability to direct the flow of oil to another tank capable of receiving the transferred oil or the capability to shut down the pumping or transfer system. This automatic shutdown system shall be tested prior to each receipt of oil and records of testing shall be maintained at the facility.

d. All ASTs shall be equipped with a gauge that is readily visible and indicates the level of oil or quantity of oil in the tank. In addition, the storage capacity and tank identification number shall be clearly marked on the tank at the location of the gauge. These gauges shall be calibrated annually.

4. Pressure testing of piping. All piping shall be pressure tested using an equivalent method or measure approved by the board at intervals not to exceed five years. The operator of an existing facility or AST shall complete the initial test on or before June 30, 1998, except operators of existing facilities or ASTs for which compliance was exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil). These exempted operators shall complete the initial test within five years after the effective date of this chapter. All newly installed or repaired piping shall be tested before being placed into service.

a. A pressure test may be a hydrostatic test at 150% maximum allowable working pressure (MAWP) or an inert gas test at 110% MAWP.

b. A test conducted and certified by an API authorized piping inspector to be in conformity with the API 570 Piping Inspection Code is deemed an equivalent method of testing approved by the board.

c. The board may consider on a case-by-case basis requests for approval of other equivalent methods or measures which conform to industry recommended practices, standards and codes. The operator shall submit a request for approval of a proposed equivalent method or measure to the board as specified in 9VAC25-94-160.

5. Visual daily inspection and weekly inspections:

a. The operator or a duly authorized representative shall conduct a daily visual inspection for each day of normal operation in the areas of the facility where this chapter applies. The facility person conducting the inspection shall document completion of this inspection by making and signing an appropriate notation in the facility records. This visual inspection shall include the following:

(1) A complete walk-through of the facility property in the areas where this chapter applies to ensure that no hazardous conditions exist;

(2) An inspection of the ground surface for signs of leakage, spillage, or stained or discolored soils;

(3) A check of the berm or dike area for excessive accumulation of water and to ensure the dike or berm manual drain valves are secured;

(4) A visual inspection of the exterior tank shell to look for signs of leakage or damage; and

(5) An evaluation of the condition of the aboveground storage tank and appurtenances:

~~b. The operator or a duly authorized representative shall conduct a weekly inspection of the facility in the areas where this chapter applies, using a checklist which contains at least the items found in the weekly inspection checklist subdivision of this section. The checklist is not inclusive of all safety or maintenance procedures but is intended to provide guidance to the requirements within this chapter. The weekly checklist shall be maintained at the facility and provided to the board upon request. This checklist shall be signed and dated by the facility person or persons conducting the inspection and shall become part of the facility record.~~

~~(1) The operator of a new AST/facility shall develop the checklist within 90 days after the date of installation.~~

~~(2) The operator of each facility exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall develop the checklist within 90 days after the effective date of this chapter.~~

~~(3) Operators of facilities not exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) and who have developed a checklist within 90 days after June 30, 1993, shall be deemed to be in compliance with this checklist requirement as of the effective date of this chapter.~~

~~c. Sample weekly inspection checklist for aboveground storage tank systems:~~

- ~~___ (1) Containment dike or berm in satisfactory condition:~~
- ~~___ (2) Containment area free of excess standing water or oil:~~
- ~~___ (3) Gate valves used for emptying containment areas secured:~~
- ~~___ (4) Containment area/base of tank free of high grass, weeds, and debris:~~
- ~~___ (5) Tank shell surface, including any peeling areas, welds, rivets/bolts, seams, and foundation, visually inspected for areas of rust and other deterioration:~~
- ~~___ (6) Ground surface around tanks and containment structures and transfer areas checked for signs of leakage:~~
- ~~___ (7) Leak detection equipment in satisfactory condition:~~
- ~~___ (8) Separator or drainage tank in satisfactory condition:~~
- ~~___ (9) Tank water bottom drawoffs not in use are secured:~~
- ~~___ (10) Tank fill valves not in use are secured:~~
- ~~___ (11) Valves inspected for signs of leakage or deterioration:~~
- ~~___ (12) Inlet and outlet piping and flanges inspected for leakage:~~
- ~~___ (13) All tank gauges have been inspected and are operational:~~

-		-	-	-	-
-	Signature of Inspector	-	Date	-	Time

~~6. Training of individuals. To ensure proper training of individuals conducting inspections required by subdivision 5 of this subsection, the operator of a facility shall train personnel based on the following requirements:~~

~~a. Each facility operator shall establish a training program for those facility personnel conducting the daily visual and weekly inspections of the facility. Facility records shall contain the basic information and procedures required by subdivision 6-c of this subsection. The required training may be conducted by the operator or by a third party. The training program established shall be maintained to reflect current conditions of the facility.~~

~~(1) The operator of a new facility shall establish the training program within six months after being brought into use.~~

~~(2) The operator of each facility exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall establish the training program within six months after the effective date of this chapter.~~

~~(3) Operators of facilities not exempted under § 62.1-44.34:17 D of the Code of~~

~~Virginia (i.e., exempted facilities not engaged in the resale of oil) and who have developed a training program within six months after June 30, 1993, shall be deemed to be in compliance with this training program requirement as of the effective date of this chapter, so long as that program reflects current conditions of the facility.~~

~~b. The required training shall be conducted for facility personnel as applicable. Personnel not receiving this initial training and who will be conducting these inspections shall receive the training prior to conducting any inspection:~~

~~(1) The operator of a new facility shall conduct the personnel training within 12 months after being brought into use and prior to personnel conducting any inspection:~~

~~(2) The operator of each facility exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall conduct the personnel training within 12 months after the effective date of this chapter:~~

~~(3) Operators of facilities not exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) and who have conducted the personnel training within 12 months after June 30, 1993, shall be deemed to be in compliance with this personnel training requirement as of the effective date of this chapter, so long as the training provided reflects current conditions of the facility and all inspections are current:~~

~~c. Training for personnel performing daily and weekly inspections shall address at a minimum:~~

~~(1) Basic information regarding occupational safety, hazard recognition, personnel protection, and facility operations;~~

~~(2) The procedures to be followed in conducting the daily visual and weekly facility inspections;~~

~~(3) The procedures to be followed upon recognition of a hazard or the potential for a hazard; and~~

~~(4) The procedure for evaluating the condition of the aboveground storage tanks and appurtenances:~~

~~d. The operator of a facility shall train facility personnel upon any changes to the contents of the initial training program or every three years and shall document this training in the facility records:~~

~~7. Leak detection: The operator shall operate, maintain, monitor and keep records of the system established for early detection of a discharge to groundwater (i.e., a method of leak detection) as required by 9VAC25-94-170 A-18 and contained in the facility's approved ODCP. These activities shall be inspected and approved by the department:~~

~~1. Formal inspections.~~

~~a. Each AST shall undergo formal external and internal tank inspections. The initial formal internal and external inspections for an AST existing on June 24, 1998 shall have been completed on or before June 30, 1998, unless otherwise specified within this chapter.~~

~~(1) All newly installed ASTs shall have initial formal inspections within five years after the date of installation.~~

~~(2) Operators of facilities existing on June 24, 1998 and exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall have completed the initial formal inspections on or before June 24, 2003.~~

~~(3) An AST with a storage capacity of less than 12,000 gallons shall not be subject to the formal internal inspection unless the integrity of the AST is in question and an inspection is deemed necessary by the board.~~

~~b. Inspections shall be conducted in accordance with the provisions of American Petroleum Institute (API) Standard 653 or Steel Tank Institute (STI) standard STI-~~

SP001 or procedure approved by the board. If construction practices allow external access to the tank bottom, a formal external inspection utilizing accepted methods of nondestructive testing or procedure approved by the board may be allowed in lieu of the internal inspection.

c. An API Standard 653 inspection conducted between January 1, 1991, and June 24, 1998, may be accepted by the board if the operator provides supporting documentation to the board for review and approval.

d. All formal inspections and testing required by 9VAC91-130 C 1 and 9VAC91-130 C 2 shall be conducted by a person certified to conduct the inspection or test. This certification shall be accomplished in accordance with the provisions of API Standard 653, STI-SP001 or a procedure approved by the board. Proof of this certification shall be maintained in the facility records. The results of all tests and inspections required by 9VAC91-130 C 1 and 9VAC91-130 C 2 shall be maintained at the facility or at a location approved by the board for the life of the tank, but for no less than five years.

2. Formal reinspections.

a. Each AST shall undergo an external reinspection every five years. Inspections shall be conducted in accordance with the provisions of API Standard 653, STI-SP001, or other procedure accepted by the board after the initial formal external inspection has been conducted.

b. Each AST with a storage capacity of 12,000 gallons of oil or greater shall undergo an internal reinspection in accordance with the provisions of API Standard 653 or STI-SP001 every 10 years after the initial formal internal inspection has been conducted.

(1) The board may require the internal reinspection sooner than 10 years if there is an indication that the corrosion rate established by the initial internal inspection or a subsequent reinspection has increased.

(2) The internal reinspection period may be extended beyond 10 years if the operator can demonstrate to the board that an extension of the reinspection period is warranted. The operator shall provide supporting documentation to the board for review and approval at least six months prior to the date the reinspection is due.

c. An AST with a storage capacity of less than 12,000 gallons shall not be subject to the formal internal reinspection unless the integrity of the AST is in question and an inspection is deemed necessary by the board.

3. Safe fill and shutdown procedures- high level alarm.

If unattended during transfer operations, the AST shall be equipped with a high level alarm or other appropriate mechanism approved by the board that will immediately alert the operator to prevent an overfill event. Activation of the high level alarm or other appropriate mechanism shall initiate an immediate and controlled emergency shutdown of the transfer, either by manual or automatic means. Each operator shall include this emergency shutdown procedure in the facility records and shall ensure that all facility personnel involved in the transfer operation are trained in this procedure. The alarm shall consist of a visual and audible device capable of alerting the operator, both by sight and hearing, to prevent an overfill situation. If the operator is in a control station, this alarm shall cause a warning light and audible signal in that station to activate. In addition, this system shall alarm on failure, malfunction or power loss. This high level alarm shall be tested prior to each receipt of oil. Records of testing shall be maintained at the facility.

4. Cathodic protection of piping.

The requirement for cathodic protection of piping shall apply to buried piping only. Cathodic protection shall be installed and maintained in accordance with the following applicable publications: API 1632, the Uniform Statewide Building Code and its referenced model codes and standards, or National Association of Corrosion Engineers (NACE) SP0285-2011. All piping above ground shall be protected from corrosion using methods and procedures referenced in the Uniform

Statewide Building Code and its referenced model codes and standards, or a procedure approved by the board. Piping that passes through the wall of the containment berm or dike or under road crossings shall be protected from corrosion and damage using practices recommended in the publications listed in this subdivision.

9VAC25-91-140. Performance standards for aboveground storage tanks newly installed, retrofitted, or brought into use.

A. All ASTs shall be built in accordance with the applicable design standards adopted by Underwriters Laboratories, the American Petroleum Institute, the Steel Tank Institute or other standard approved by the board.

B. All ASTs shall be strength tested before being placed in use in accordance with the applicable code or standard under which they were built.

C. ASTs that have the tank bottom in direct contact with the soil shall have a determination made by a corrosion professional as to the type and degree of corrosion protection needed to ensure the integrity of the tank system during the use of the tank. If a survey indicates the need for corrosion protection for the new installation, corrosion protection shall be provided.

D. ASTs installed after ~~the effective date of this chapter~~ June 30, 1993 shall have a release prevention barrier (RPB) installed either under or in the bottom of the tank. The RPB shall be capable of: (i) preventing the release of the oil and (ii) containing or channeling the oil for leak detection.

E. Existing ASTs that are retrofitted (reconstruction or bottom replacement) or brought back into use shall be brought into compliance with subsections A, B, C, and D of this section. The operator shall submit a schedule to the ~~board~~ department of the work to be performed in order to bring the existing AST into compliance with new-built construction standards. This compliance schedule shall be submitted to the ~~board~~ department no less than six months prior to the anticipated completion date.

F. Operators of ASTs installed, retrofitted (reconstruction or bottom replacement) or brought back into use shall also comply with ~~9VAC25-91-130 A or 9VAC25-91-130 B; 9VAC25-91-130 B and 9VAC25-91-130 C, whichever is~~ as applicable.

G. All newly installed ASTs shall be constructed and installed in a manner consistent with the applicable standards and requirements found in ~~NFPA 30 and the BOCA National Building Code~~ the Uniform Statewide Building Code and its referenced model codes and standards or other standards approved by the board. Approval and any applicable permits shall be obtained from the local building official before construction starts.

H. Compliance dates for subsections A through G of this section.

1. Operators of a newly installed, retrofitted or brought-back-into-use facility or AST shall comply with the requirements of this section within 30 days prior to being placed into service.

2. Operators of facilities existing on June 24, 1998 and exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) shall ~~comply~~ have complied with these requirements ~~within 120 days of the effective date of this chapter.~~ by October 22, 1998.

3. Operators of facilities existing on June 24, 1998 and not exempted under § 62.1-44.34:17 D of the Code of Virginia (i.e., exempted facilities not engaged in the resale of oil) and who have met these requirements on or before June 30, 1993, shall be deemed to be in compliance with these requirements as of the effective date of this chapter.

9VAC25-91-145. Performance Standards for certain aboveground storage tanks located in the City of Fairfax.

A. The requirements of this section apply to aboveground storage tanks at facilities with an aggregate capacity of one million gallons or greater existing prior to January 29, 1992, and located in the City of Fairfax.

B. All ASTs altered as required by this section shall be strength tested before being returned to use in accordance with the applicable code or standard under which they were built.

C. All ASTs shall contain a release prevention barrier (RPB) either under or in the bottom of the tank. The RPB shall be capable of: (i) preventing the release of the oil and (ii) containing or channeling the oil for leak detection. Existing elevated ASTs that are installed in containment areas meeting the requirements of an RPB or that are located within earthen containment dikes and are included in the daily and weekly inspections required by 9VAC25-91-130 B 5 shall be considered to be in compliance with the requirements of this section.

D. All ASTs altered as required by this section shall meet the applicable standards and requirements found in the Uniform Statewide Building Code or other standards approved by the board. Approval and any applicable permits shall be obtained from the local building official before altering ASTs.

E. Operators of facilities subject to this section shall meet the performance standards of this section no later than July 1, 2021.

9VAC25-91-150. Recordkeeping and access to facilities.

A. Each operator of a facility subject to this chapter shall maintain the following records:

1. All records relating to all required measurements and inventory and reconciliation of oil at the facility;
2. All records relating to required tank/pipe testing;
3. All records relating to spill events and other discharges of oil from the facility;
4. All supporting documentation for developed contingency plans;
5. All records for implementation and monitoring of leak detection and applicable provisions of 9VAC25-91-170 A 18 of Part IV (9VAC25-91-170, Oil Discharge Contingency Plan (ODCP) Requirements) of this chapter;
6. All records relating to training of individuals; ~~and~~
7. All records relating to facility and tank inspections; and
8. Any records required to be kept by statute or regulation of the board.

B. These records shall be kept by the operator of a facility at the facility or at an alternate location approved by the board for a period of no less than five years unless otherwise indicated.

C. Upon request, each operator shall make these records available to the board department and to the director or coordinator of emergency services for the locality in which the facility is located or to any political subdivision within one mile of the facility.

D. Operators shall maintain all records relating to compliance with this chapter for a period of no less than five years from the date the board department receives notice of the closure unless otherwise indicated. These records shall be made available to the board department at any time upon request.

9VAC25-91-160. Variances to the requirements of Part III (9VAC25-91-130 et seq.) of this chapter.

A. General criteria for granting a variance on a case-by-case basis.

1. The board is required by § 62.1-44.34:15.1 of the Code of Virginia to establish the criteria to grant variances of the AST pollution prevention requirements on a case-by-case basis and by regulation for categories of ASTs. Any person affected by this chapter may petition the board to grant a variance of any requirement of Part III (9VAC25-91-130 et seq.) of this chapter.

2. The board will not grant any petition for a variance related to:

- a. Definitions;
- b. Registration;
- c. Classification of aboveground storage tanks; or
- d. Oil discharge contingency plans.

3. The board may grant a variance if:

- a. The applicant demonstrates to the satisfaction of the board that the alternate design or operation will result in a facility that is equally capable of preventing pollution of state water, land, and storm drains from the discharge of oil from new and existing ASTs. If the variance would extend a deadline, the petitioner shall demonstrate that a good faith effort to comply with the deadline was made;
- b. Granting the variance will not result in an unreasonable risk to human health or the environment; and
- c. Granting the variance will not result in a conflict with applicable local codes or ordinances.

4. In rendering a decision, the board may:

- a. Deny the petition;
 - b. Grant the variance as requested;
 - c. Grant a modified variance which:
 - (1) Specifies additional or modified requirements;
 - (2) Includes a schedule for:
 - (a) Periodic review of the modified requirements;
 - (b) Implementation by the facility of such control measures as the board finds necessary in order that the variance may be granted; or
 - (c) Compliance, including increments of progress, by the facility with each requirement of the variance; or
 - (3) Specifies the termination date of the variance.
 - d. Grant a partial variance that:
 - (1) Specifies a particular part of the requirement;
 - (2) Specifies a particular part of the request;
 - (3) Includes a schedule for:
 - (a) Periodic review of the partial requirements;
 - (b) Implementation by the facility of such control measures as the board finds necessary in order that the variance may be granted; or
 - (4) Specifies the termination date of the variance.
5. An operator must comply with the requirements of this chapter even when a variance request is under consideration by the board. A variance request submitted but disapproved, or submitted but not yet decided, shall not constitute a defense or delay to any enforcement action undertaken by the department.
- B. Administrative procedures.
1. General requirements for the submission of a petition by the owner or a duly authorized representative. All petitions submitted to the board shall include:
 - a. The owner's or duly authorized representative's name and address;
 - b. A citation of the regulatory requirement to which a variance is requested;
 - c. An explanation of the need or desire for the proposed action, including the reason the existing requirement is not achievable or is impractical compared to the alternative being proposed;

- d. An explanation of the impact to applicable local codes and ordinances;
- e. A description of the proposed action;
- f. The duration of the variance, if applicable;
- g. The potential impact of the variance on human health or the environment and a justification of the proposed action's ability to provide equivalent protection of human health and the environment as would compliance with the regulatory requirements;
- h. Enforcement action against or pending against the petitioner;
- i. Other information believed by the applicant to be pertinent; and
- j. The following statements signed by the owner or a duly authorized representative:

"I certify that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. The petition, if granted, will not be in violation of any local codes or ordinances or pose an unreasonable risk to human health or the environment. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

2. In addition to the general information required of all petitioners under subdivision 1 of this subsection, the petitioner shall submit other information as may be required by the board.

3. All variance petitions and correspondence shall be submitted to the following address:

Mailing Address:

Department of Environmental Quality
Office of Spill Response and Remediation
P.O. Box ~~46009~~ 1105
Richmond, VA ~~23240-0009~~ 23218

Street Address:

Department of Environmental Quality
Office of Spill Response and Remediation
629 E. Main Street
Richmond, VA 23219

C. Petition processing.

1. After receiving a petition that includes the information required in subdivision B 1 of this section, the board will determine whether the information received is sufficient to render the decision. If the information is deemed to be insufficient, the board will specify additional information needed and request that it be furnished.

2. The petitioner may submit the additional information requested, may attempt to show that no reasonable basis exists for the request for additional information, or may withdraw the petition. If the board agrees that no reasonable basis exists for the request for additional information, the board will act in accordance with subdivision 3 b of this subsection. If the board continues to believe that a reasonable basis exists to require the submission of such information, the board will deny the petition.

3. After the petition is deemed complete:

- a. The board will review the petition;
- b. After evaluating the petition, the board will notify the applicant of the following

final decision:

(1) Petition is denied;

(2) Requested variance is granted; or

(3) Modified or partial variance is granted;

c. The board shall send written notification of the variance to the chief administrative officer of the locality in which the facility is located; and

d. If the board grants a variance request, the notice to the petitioner shall provide that the variance may be terminated upon a finding by the board that the petitioner has failed to comply with any variance requirements.

D. Variance by regulation for categories of ASTs.

1. ASTs totally off ground with;

a. all associated piping off ground;

b. all associated buried piping double walled; or

c. all associated piping meeting the requirements using a combination of 9VAC25-91-160 D 1 a and 9VAC25-91-160 D 1 b, shall not be subject to inventory control or testing for significant variation.

2. ASTs with a capacity of 5,000 gallons or less located within a building or structure designed to fully contain a discharge of oil shall not be subject to inventory control or testing for significant variation.

3. ASTs containing No. 5 or No. 6 fuel oil for consumption on the premises where stored shall not be subject to inventory control or testing for significant variation.

4. ASTs with release prevention barriers (RPBs) with;

a. all associated piping off ground; ground;

b. all associated buried piping double walled; or

c. all associated piping meeting the requirements using a combination of 9VAC25-91-160 D 4 a and 9VAC25-91-160 D 4 b, with an established corrosion rate and cathodic protection that protects the entire area of the tank bottom shall not be subject to inventory control or testing for significant variation.

5. ASTs with release prevention barriers (RPBs) with;

a. all associated piping off ground;

b. all associated buried piping double walled; or

c. all associated piping meeting the requirements using a combination of 9VAC25-91-160 D 5 a and 9VAC25-91-160 D 5 b, and with secondary containment that is 72 hours impermeable shall not be subject to inventory control or testing for significant variation.

6. ASTs that meet the construction and installation standards of ~~STI-F911-93, F921-93, or F941-94~~ STI- F911, F921, or F941, or equivalent standards approved by the board shall not be subject to inventory control or testing for significant variation.

7. For refineries with a continuous leak detection monitoring system and cathodic protection of the AST and piping, a significant variation of inventory shall be considered a loss in excess of 3.0% by weight of the difference between the refinery's input and output.

8. Vaulted tanks meeting UL 2245 or an equivalent standard approved by the board shall not be subject to inventory control or testing for significant variation.

The inspections for these tanks required in 9VAC25-91-130 B 5 need to be conducted no more frequently than once every 31 days. The criteria for the visual daily inspection and weekly inspection checklist shall be incorporated into a monthly checklist.

9. An AST used in the production/manufacturing process with full containment that

is 72 hours impervious shall not be subject to inventory control or testing for significant variation.

10. An AST of 12,000 gallons or less with full containment that is 72 hours impervious, inside a building and used for the storage of heating oil consumed on the premises shall not be subject to inventory control or testing for significant variation.

11. A double walled AST shall not be subject to inventory control or testing for significant variation. The inspections required in 9 VAC25-91-130 B 5 need be conducted no more frequently than once every 31 days. The criteria for the visual daily inspection and weekly inspection checklist shall be incorporated into a monthly checklist.

Part IV

Oil Discharge Contingency Plan (ODCP) Requirements

9VAC25-91-170. Contingency plan requirements and approval.

A. Section 62.1-44.34:15 of the Code of Virginia requires that all facility oil discharge contingency plans must conform to the requirements and standards determined by the board to be necessary to ensure that the applicant can take such steps as are necessary to protect environmentally sensitive areas, to respond to the threat of an oil discharge, and to contain, clean up and mitigate an oil discharge within the shortest feasible time. Each such plan shall provide for the use of the best available technology (economically feasible, proven effective and reliable and compatible with the safe operation of the facility) at the time the plan is submitted for approval and, in order to be approvable, shall contain, at a minimum, the following requirements:

1. The name of the facility, geographic location and access routes from land and water if applicable;
2. The names of the operators of the facility including address and phone number;
3. A physical description of the facility consisting of a plan of the facility which identifies the applicable oil storage areas, transfer locations, control stations, above and below ground oil transfer piping within the facility boundary (and including adjacent easements and leased property), monitoring systems, leak detection systems and location of any safety protection devices;
4. A copy of the material safety data sheet (MSDS) or its equivalent for each oil or groups of oil with similar characteristics stored, transferred or handled at the facility. To be equivalent, the submission shall contain the following:
 - a. Generic or chemical name of the oil;
 - b. Hazards involved in handling the oil; and
 - c. A list of fire-fighting procedures and extinguishing agents effective with fires involving each oil or groups of oil demonstrating similar hazardous properties which require the same fire-fighting procedures;
5. The maximum storage or handling capacity of the facility and the individual tank capacities or, in the case of a pipeline, the average daily throughput of oil;
6. A complete listing, including 24-hour phone numbers, of all federal, state and local agencies required to be notified in the event of a discharge;
7. The position title of the individuals responsible for making the required notifications and a copy of the notification check-off list;
8. The position title, address and phone number of the individuals authorized to act on behalf of the operator to implement containment and cleanup actions. This individual shall be available on a 24-hour basis to ensure the appropriate containment and cleanup actions are initiated;
9. The position title of the individuals designated by the operator to ensure compliance during containment and cleanup of a discharge with applicable federal, state and local requirements for disposal of both solid and liquid wastes;

10. Identification and insurance~~4~~ by contract or other means acceptable to the board of the availability of private personnel and equipment necessary to remove to the maximum extent practicable the worst case discharge and to mitigate or prevent a substantial threat of such a discharge. This contract or agreement shall ensure a certain response within the shortest feasible time. The board will accept a letter of understanding between the operator and the response contractors which attests to this capability being readily available. Membership in a cleanup cooperative or other response organization is also acceptable. A listing of contractor or cooperative capabilities, including an inventory of the equipment and specification of the other information required by subdivision 12 of this subsection, shall be included unless these capabilities are already on file with the ~~board;~~ department;

11. Assessment of the worst case discharge, including measures to limit the outflow of oil, response strategy and operational plan. For the purpose of this chapter, the worst case discharge is the instantaneous release of the volume of the largest tank on the facility (125% of the volume of the largest tank for facilities with multiple tanks within a single containment dike) during adverse weather conditions. Facilities shall take into consideration that due to hydraulic pressure of the release, the secondary containment will not contain this volume in its entirety. The worst case discharge for a pipeline shall be based upon the volume of a discharge calculated using the maximum pressure, velocity, and elevation, and the largest pipe size and pipeline location. If facility design and operation indicates that this worst case discharge scenario does not meet the intent of this chapter, the board may require submission of other worst case scenarios on a facility-specific basis;

12. Inventory of facility containment equipment, including specification of quantity, type, location, time limits for gaining access to the equipment, and identification of facility personnel trained in its use;

13. Identification and location of natural resources at risk (including, but not limited to, surface waters as indicated on the applicable USGS quadrangle maps, groundwater, public water supplies, public and private water wells and springs, state or federal wildlife management areas, wildlife refuges, management areas, sanctuaries, property listed on the National Register of Historic Places and property listed on the National Register of Natural Landmarks), priorities for protection and means of protecting these resources;

a. In addition to the requirements set forth in this subdivision, the operator of a facility with an aggregate aboveground storage or handling capacity of one million gallons or greater of oil shall conduct a groundwater characterization study (GCS) within the geographic boundaries of the facility to be submitted as part of the contingency plan. The operator of such a facility shall utilize upgradient and downgradient GCS monitoring wells to satisfy this requirement. At the time of a discharge, the operator of such a facility shall conduct further characterization of the groundwater as required by the board;

b. For purposes of satisfying the requirement to identify and locate natural resources at risk, the operator of a pipeline shall identify surface waters as indicated on the applicable USGS quadrangle maps, public water supplies, state or federal wildlife management areas, wildlife refuges, management areas, sanctuaries, property listed on the National Register of Historic Places and property listed on the National Register of Natural Landmarks which could reasonably be expected to be impacted by the discharge. At the time of a discharge, the operator of a pipeline shall conduct a complete groundwater characterization study as required by the board and identify other natural resources at risk including public and private wells or springs which could reasonably be expected to be impacted by the discharge;

14. Identification and location of any municipal or other services (including, but not limited to, storm drains, storm water collection systems and sanitary sewer systems) at risk, notification procedures applicable and means of protection of these services. The identification and location of all municipal services shall include those services for which official records are available. The operator of a pipeline shall determine which sections of the system are located in areas that would require an immediate response by the operator to prevent hazards to the

public if a discharge occurred;

15. If applicable, the facility's responsibility for responding to a discharge from a vessel moored at the facility and the identity of the sizes, types, and number of vessels that the facility can transfer oil to or from simultaneously;

16. A description of training, equipment testing, and periodic unannounced oil discharge drills conducted by the operator to mitigate or prevent the discharge or the substantial threat of a discharge;

17. The facility's oil inventory control procedures. Facilities shall ensure that this control procedure is capable of providing for the detection of a discharge of oil within the shortest feasible time in accordance with recognized engineering practices and industry measurement standards;

18. A detailed description of a system for early detection of a discharge to groundwater, utilizing up-gradient and down-gradient leak detection monitoring wells or other groundwater protection measures acceptable to the board (i.e., visual, interstitial, vapor and leak detection groundwater monitoring wells). The system will be operated, maintained and monitored in the manner approved and be subject to inspection by the department under the pollution prevention requirements of Part III (9VAC25-91-130 et seq., Pollution Prevention Requirements) of this chapter. Operators subject to subdivision 13 a of this subsection may utilize such GCS wells to meet this requirement when approved by the board;

19. The procedures to be followed, upon detection of a discharge of oil, for testing and inspection of all tanks, piping and all oil transfer associated equipment that could reasonably be expected to be a point source for the discharge. These procedures shall be conducted within the shortest feasible time, include a progression of written procedures from visual inspection to formal testing and be conducted in accordance with recognized engineering practices;

20. The facility's preventive maintenance procedures applicable to the critical equipment of an oil storage and transfer system as well as the maximum pressure for each oil transfer system. The term "critical equipment" shall mean equipment that affects the safe operation of an oil storage and handling system;

21. A description of the security procedures used by facility personnel to avoid intentional or unintentional damage to the facility; and

22. A post-discharge review procedure to assess the discharge response in its entirety.

B. All nonexempt facility operators shall file with the board the application form for approval of the contingency plan. This form shall be submitted with the required contingency plan and shall be completed insofar as it pertains to the facility. The operator shall sign and date the certification statement on the application form. If the operator is a corporation, the form shall be signed by an authorized corporate official; if the operator is a municipality, state, federal or other public agency, the form shall be signed by an authorized executive officer or ranking elected official; if the operator is a partnership or sole proprietorship, the form shall be signed by a general partner or the sole proprietor. All forms shall be acknowledged before a Notary Public.

C. Contingency plans shall be filed with and approved by the board. The plan shall be submitted to the board at the address specified in 9VAC25-91-60 A. A copy of the original with the facility-specific information and the approval letter shall be retained at the facility and shall be readily available for inspection.

D. An operator of multiple facilities may submit a single contingency plan encompassing more than one facility if the facilities are located within the defined boundaries of the same city or county or if the facilities are similar in design and operation. The plan shall contain site-specific information as required by subsection A of this section for each facility. The site-specific information shall be placed in appendices to the plan.

Upon renewal of an approved contingency plan submitted under this subsection, the board shall consider the individual facilities subject to all provisions of

subsections E through J of this section.

E. Oil discharge contingency plans shall be reviewed, updated if necessary and resubmitted to the board for approval every 60 months from the date of approval unless significant changes occur sooner. Operators shall notify the board of significant changes and make appropriate amendments to the contingency plan within 30 days of the occurrence. For the purpose of this chapter, a significant change includes the following:

1. A change of operator of the facility;
2. An increase in the maximum storage or handling capacity of the facility that would change the measures to limit the outflow of oil, response strategy or operational plan in the event of the worst case discharge;
3. A decrease in the availability of private personnel or equipment necessary to remove to the maximum extent practicable the worst case discharge and to mitigate or prevent a substantial threat of such a discharge;
4. A change in the type of product dealt in, stored or handled by any facility covered by the plan for which a MSDS or its equivalent has not been submitted as part of the plan; or
5. A change in the method or operation utilized for the early detection of a discharge to groundwater (i.e., change in a method of leak detection).

F. Updated plans or certification for renewal of an existing plan shall be submitted to the board for review and approval not less than 90 days prior to expiration of approval of the current plan. Submittal of the certification for renewal for an existing plan shall be made in accordance with the provisions of subsection B of this section. All notifications of changes, renewals, submissions and updates of plans required by this chapter shall be directed to the respective regional office.

G. An oil discharge exercise may be required by the board to demonstrate the facility's ability to implement the contingency plan. The board will consult with the operator of the facility prior to initiating an exercise. Where appropriate, the board will ensure coordination with federal agencies prior to initiation of an exercise.

H. The board may, after notice and opportunity for a conference pursuant to ~~§ 9-6-14.1~~ § 2-2-4019 of the Code of Virginia, deny or modify its approval of an oil discharge contingency plan if it determines that:

1. The plan as submitted fails to provide sufficient information for the board to process, review and evaluate the plan or fails to ensure the applicant can take such steps as are necessary to protect environmentally sensitive areas, to respond to the threat of a discharge, and to contain and clean up an oil discharge within the shortest feasible time;
2. A significant change has occurred in the operation of the facility covered by the plan;
3. The facility's discharge experience or its inability to implement its plan in an oil spill discharge exercise demonstrates a necessity for modification; or
4. There has been a significant change in the best available technology since the plan was approved.

I. The board, after notice and opportunity for hearing, may revoke its approval of an oil discharge contingency plan if it determines that:

1. Approval was obtained by fraud or misrepresentation;
2. The plan cannot be implemented as approved;
3. A term or condition of approval of this chapter has been violated; or
4. The facility is no longer in operation.

J. A Facility Response Plan (FRP) developed pursuant to § 4202 of the federal Oil Pollution Act of 1990, Pub. L. No. 101-380, 33 USCA § 2716 (1996), may be accepted as meeting the requirements of subdivisions A 1 through A 22 of this section. The operator shall submit a copy of the FRP and a copy of the currently

valid FRP approval letter for the facility for review and approval by the board. The FRP shall contain a cross reference in order to index pages for the specific requirements of the ODCP. The FRP shall also contain the satisfaction of the requirements of subdivisions A 13 a and A 18 of this section. This information shall be resubmitted in accordance with the renewal period established by federal statute or regulation but in no instance shall the renewal period exceed five years. The board shall be notified of any plan ~~amendments-~~ amendments within thirty days of the amendment.

~~So in original:~~

Part V
Groundwater Characterization Study (GCS) and GCS Well Monitoring Requirements

9VAC25-91-180. Groundwater characterization study (GCS).

A. Section 62.1-44.34:15 of the Code of Virginia requires the operator to apply to the board for approval of an ODCP. The ODCP shall be accompanied by other relevant information required by the board (e.g., groundwater characterization study (GCS) of each facility with an aggregate aboveground storage capacity of one million gallons or greater of oil). The purpose of this GCS is to determine baseline conditions and flow of groundwater within the geographic boundaries of the facility. The operator's results of the GCS shall be subject to the review and approval of the ~~department board~~ and shall be submitted to the department as part of the Oil Discharge Contingency Plan (ODCP) referenced in Part IV (9VAC25-91-170, Oil Discharge Contingency Plan (ODCP) Requirements) of this chapter. The GCS wells are required by 9VAC25-91-170 A 13 a in the ODCP requirements.

B. Section 62.1-44.34:15.1 of the Code of Virginia requires that the operator of a facility with an aggregate capacity of one million gallons or greater of oil conduct monthly gauging and inspection, monitoring of well headspace, and quarterly sampling and laboratory analysis of all groundwater monitoring wells located at the facility to determine the presence of petroleum or petroleum by-product contamination. ~~The monitoring requirements of these GCS wells are in 9VAC25-91-190, GCS well monitoring:~~

C. Although GCS monitoring wells may be approved for use as part of a leak detection system, the GCS well monitoring requirement should not be confused with any requirement for leak detection monitoring wells required by 9VAC25-91-170 A 18.

9VAC25-91-200. Reporting; GCS well monitoring report.

A. All observations and data gathered as a result of the requirements in 9VAC25-91-190 and any other data obtained from those same wells shall be maintained at the facility, compiled, and submitted to the ~~board~~ department annually in the following format:

I. Monthly gauging of GCS groundwater monitoring wells.

1.0 Summary of measurement procedures.

2.0 Table of static water levels recorded from monitoring wells.

II. Quarterly GCS groundwater vapor monitoring.

1.0 Summary of groundwater and vapor collection procedures.

2.0 Table of vapor measurements from monitoring well headspace.

3.0 Table of groundwater monitoring well visual inspection results.

III. Annual GCS groundwater quality evaluation.

1.0 Summary of groundwater collection methods.

2.0 Summary of groundwater analytical results and interpretation.

3.0 Table of analytical methods used.

4.0 Table of analytical results.

5.0 Table of field and trip blank results.

6.0 Groundwater laboratory data including chain-of-custody forms.

7.0 Laboratory quality assurance review.

B. The annual GCS monitoring report shall include the facility name and address, operator, and consultant, if any, who prepared the report, contact person and the date the report was submitted.

Part VI

Referenced Publications Resources Available

9VAC25-91-220. Referenced publications: Resources Available.

NOTE: The Facility and Aboveground Storage Tank regulations (9VAC25-91-10 et seq.) do not contain all requirements for aboveground storage tanks in Virginia. The resources listed in this section have been included to assist with complying with requirements of this regulation. Section 36-99.6 of the Code of Virginia requires the Board of Housing and Community Development to incorporate, as part of the building code, regulations adopted and promulgated by the State Water Control Board governing the installation, repair, upgrade and closure of aboveground storage tanks. Portions of this regulation are incorporated into the Virginia Uniform Statewide Building Code (USBC). The USBC referenced model codes and standards apply as promulgated by the Virginia Department of Housing and Community Development.

A. The following documents or portions thereof are resources referenced or provide guidance in this chapter:

1. Underwriters Laboratories Standards:

a. Specification 142, "Steel Aboveground Tanks for Flammable and Combustible Liquids," Seventh Ninth Edition;

b. Standard 2245, "Standard for Below-Grade Vaults for Flammable Liquid Storage Tanks," Second Edition, December 28, 2006;

2. American Petroleum Institute (API) Standards:

a. API 12B: Specification 12B and Supplement 2, October 1, 1996; October 2008, "Specification for Bolted Tanks for Storage of Production Liquids," Thirteenth Fifteenth Edition;

b. API 12D: Specification 12D, and Supplement 2, 1982 as supplemented 1985; October 2008, "Specification for Field Welded Tanks or for Storage of Production Liquids," Ninth Eleventh Edition;

c. API 12F: Specification 12F, and Supplement 1, 1982 as supplemented 1989; October 2008, "Specification for Shop Welded Tanks for Storage of Production Liquids," Tenth Twelfth Edition;

d. API 570: Piping Inspection Code, "Inspection, Repair, Alteration, and Rerating of In-Service Piping Systems, First Edition, June 1999;

e.d. API 575: May 2005, "Inspection of Existing Atmospheric and Low-pressure Storage Tanks," Second edition, May 2005;

e. API 620: Standard 620, 1999; February 2008, "Design and Construction of Large, Welded, Low-Pressure Storage Tanks," includes Addendum 1 (2009), Addendum 2 (2010) and Addendum 3 (2012), Eighth Eleventh Edition;

f. API 650: Standard 650, 1989; June 2001, "Welded Steel Tanks for Oil Storage," Eighth Eleventh Edition;

g. API 651: Recommended Practice 651, January 2007, □Cathodic Protection for Above Ground Petroleum Storage Tanks.□ Third Edition;

g: h. API 652: Recommended Practice 652, April 1991; October 2005, "Lining of Aboveground Petroleum Storage Tank Bottoms," First Third Edition;

~~h. API 653: API Standard 653, January 1991, "Tank Inspection, Repair, Alteration, and Reconstruction," First Edition, incorporates supplement 1, January 1992;~~

~~i. API 2350: Recommended Practice 2350, March 1987, January 2005, "Overfill Protection for Petroleum Storage Tanks,"; Third edition;~~

~~3. National Fire Protection Association (NFPA) Standards:~~

~~a. NFPA 30, "Flammable and Combustible Liquids Code," 1996 edition;~~

~~b. NFPA 30A, "Automotive and Marine Service Station Code," 1996 edition;~~

~~4. National Association of Corrosion Engineers (NACE) Standards: Recommended Practice 0285-95 (1995), "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems";~~

~~5. 40 CFR Part 112 (1997), "Oil Pollution Prevention";~~

~~6. 29 CFR Part 1910.106 (1997), "Flammable and Combustible Liquids";~~

~~7. Uniform Statewide Building Code (USBC), 1996 edition;~~

~~8. 4. Virginia Statewide Fire Prevention Code (SWFPC), 1996 edition; (March 1, 2011); and~~

~~9. Building Officials & Code Administrators International, Inc. (BOCA); BOCA National Building Code, 1996 edition;~~

~~a. Chapter 32 Flammable and Combustible Liquids;~~

~~b. Chapter 23 Hazardous Materials; and~~

~~40. 5. Steel Tank Institute (STI), Standards and Recommended Practices:~~

~~a. STI Standard for Diked Aboveground Storage Tanks F911-93; F911;~~

~~b. STI Standard for Aboveground Tanks with Integral Secondary Containment F921-93; F921, revised July 2011;~~

~~c. STI Fireguard™ Specifications for Fireguard protected Thermally-Insulated Aboveground Storage Tank Standard Tanks F941-94; F941;~~

~~B. The issue of the industry specification, standard, or code, including addenda or changes, described in this chapter as referenced publications, shall be used unless circumstances warrant the use of an earlier date and are specifically authorized by the board. Standards and codes listed in 9VAC25-220 A are specifically authorized for use by the board. Other standards and codes may be used if specifically authorized by the board.~~

~~C. This chapter refers to resources that may be used to comply with provisions of the regulations. These resources are available through the Internet; therefore, in order to assist the regulated community, the resource reference document owner's contact information, including uniform resource locator or internet address is provided for each of the resource references listed in this section.~~

~~1. Underwriter's Laboratories,~~

~~<http://www.ul.com/global/eng/pages/solutions/standards/>, Underwriter's Laboratories, 2600 N.W. Lake Rd, Camas, WA 98607-8542~~

~~2. American Petroleum Institute, <http://api.org> , API, 1220 L Street, NW, Washington, DC 20005-4070~~

~~3. National Association of Corrosion Engineers , <http://nace.org> , NACE, 1440 South Creek Drive, Houston, TX USA 77084-4906~~

~~4. Code of Federal Regulations, <http://www.gpo.gov/fdsys/>.~~

~~5. Virginia Uniform Statewide Building Code (USBC)-~~

~~[http://www.dhcd.virginia.gov/StateBuildingCodesandRegulations/Virginia Uniform Statewide Building Code.htm](http://www.dhcd.virginia.gov/StateBuildingCodesandRegulations/Virginia%20Uniform%20Statewide%20Building%20Code.htm), Virginia Department of Housing and Community Development , Main Street Centre , 600 East Main Street, Suite 300, Richmond, VA 23219~~

~~6. Virginia Statewide Fire Prevention Code-~~

<http://www.dhcd.virginia.gov/StateBuildingCodesandRegulations/>, Virginia Department of Housing and Community Development, Main Street Centre, 600 East Main Street, Suite 300, Richmond, VA 23219

7. Steel Tank Institute- www.steeltank.com, 944 Donata Ct., Lake Zurich, IL 60047

DOCUMENTS INCORPORATED BY REFERENCE (9VAC25-91)

American Petroleum Institute (API) Standard API 570: Piping Inspection Code, November 2009 "Inspection, Repair, Alteration, and Retrating of In-Service Piping Systems, Alteration of Piping Systems," First Edition, June 1993; Third Edition

American Petroleum Institute (API) Standard API Standard 653, April 2009, "Tank Inspection, Repair, Alteration, and Reconstruction," includes Addendum 1 (2010) and Addendum 2 (2012), Fourth Edition

American Petroleum Institute (API) Standard API 1632: Recommended Practice 1632, 2002 "Cathodic Protection of Underground Petroleum Storage Tanks and Piping systems," Third edition

National Association of Corrosion Engineers (NACE) SP0285-2011, "Corrosion Control of Underground Storage Tank Systems by Cathodic Protection"

40 CFR Part 112 (1997), (July 1, 2011), "Oil Pollution Prevention"

29 CFR Part 1910.106 (1997), (July 1, 2011), "Flammable and Combustible Liquids"

Uniform Statewide Building Code (USBC), and its referenced model codes and standards, as promulgated by the Virginia Department of Housing and Community Development; (March 1, 2011)

Steel Tank Institute (STI), Standard STI - SP001 "Standard for the Inspection of Aboveground Storage Tanks," Fifth edition, September 2011.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Organization

Name: J. Kenneth Payne, Jr., AIA

Representing: VSAIA

Mailing Address: 3200 Norfolk Street, Richmond, VA 23230

Email Address: kpayne@moseleyarchitects.com

Telephone Number: 804.794.7555

Proposal Information

Code(s) and Section(s): **2012 IBC, Sections 202; 308.5; and new Section 308.5.6**

Proposed Change (including all relevant section numbers, if multiple sections):

Add new definition in Section 202 as follows:

LOCKUP AREA. See Section 308.5.6.

Revise 308.4 as follows:

308.5 Institutional Group I-3. This occupancy shall include buildings and structures that are inhabited by more than five persons who are under restraint or security. An I-3 facility is occupied by persons who are generally *incapable of self-preservation* due to security measures not under the occupants' control. This group shall include, but not be limited to, the following:

- Correctional centers
- Detention centers
- Jails
- Lockup areas
- Prerelease centers
- Prisons
- Reformatories

Buildings of Group I-3 shall be classified as one of the occupancy conditions indicated in Sections 308.5.1 through 308.5.5 (see Section 408.1).

Add new subsections to 308.5 as follows:

308.5.6 Lockup area. An area located in an occupancy, other than an I-3 main occupancy, containing holding cells and associated rooms or spaces, where occupants are restrained or detained for penal or correctional purposes, by the use of security measures not under the occupant's control, and where occupants do not inhabit or sleep within the holding cells and associated rooms or spaces.

308.5.6.1 Occupancy classification. Lockup areas may be classified as an accessory occupancy complying with Sections 508.2.1, 508.2.2, and 508.2.4, provided all of the following are met:

1. Detainee occupant load of each lockup area shall not exceed 30.
2. Aggregate detainee occupant load per story shall not exceed 120.
3. No occupant shall be detained for more than 8 hours in a lockup area.
4. Compliance with applicable provisions of Section 408, with the exception of Sections 408.6 and 408.9.
5. Requirements of the main occupancy in which the lockup area is located shall be met.
6. Building or structure in which the lockup area is located shall be fully sprinklered in accordance with Section 903.3.1.1.

Revise Section 408.8.2 and add subsection as follows:

408.8.2 Occupancy Condition 5. Each sleeping area in Occupancy Condition 5 or lockup area shall be separated from adjacent sleeping areas, lockup areas, corridors and common spaces by a smoketight partition. Additionally, common spaces shall be separated from the corridor by a smoke-tight partition.

408.8.2.1 Lockup area separation. Construction supporting fire barriers, smoke barriers, or horizontal assemblies used for lockup area separations in buildings of Type IIB, IIIB, and VB construction is not required to be fire-resistance rated unless required by other sections of this code.

Supporting Statement (including intent, need, and impact of the proposal):

The goal is to apply provisions consistent with I-3 occupancies to lockup areas, without applying I-3 provisions to the entire building (specifically, regarding height limitations and smoke control system based on the limited I-3 occupancy).

I-3 is defined, in part, as buildings "that are *inhabited*" which must then be further defined as one of 5 conditions – where each condition refers to *sleeping* areas. Thus, it appears areas where detainees are held for a limited time do not meet the definition of an I-3 occupancy. However, I-3 is the closest occupancy classification (occupants under restraint or security and are generally incapable of self-preservation) and is almost always applied to such lockup / holding cell areas – which creates ambiguities, including Section 408.2, and onerous requirements for the rest of the occupancies within the main building.

Section 408.2 has been interpreted and enforced differently by building officials throughout Virginia, and consistency would benefit the designers, owners, and ultimately the Commonwealth.

This code change proposal takes some portions of two code change proposals (G33-12 and G37-12) which were "Disapproved" by the General Code Committee at the 2012 ICC Code Development Hearing in Dallas, to address those situations where you have lockup areas / holding cells (generally classified as I-3) located within *other* occupancies such as: courthouses, police stations, security offices (arenas, stadiums, airports, shopping mall, etc.), custom facilities, immigration facilities, and similar types of facilities, where the detainees are there for a limited time, do not inhabit or sleep in the holding cell, and the occupant load is limited.

Note: This is different than the current code language in Section 408.2 which states, "portions of buildings in Group I-3 occupancies," not "I-3 occupancies in _____ occupancies."

Reasons for disapproval of G33-12 and/or G37-12 included the following:

1. Confusion with psychiatric, neonatal, and dementia wards.
2. Occupant load of 50 seems too high and inconsistent with other IBC criteria and further coordination with I-3 occupant loads should be made.
3. No limitations on how many lockup facilities could be located within a building (could be used to replace I-3 occupancies).
4. Built-in systems were preferred over contacting the fire department.
5. Concerned with use of terms "trained and practiced."
6. Smoke barriers may make observation difficult.
7. Sprinklers were not required throughout the building, and only within the lockup facility.
8. A time limit needs to be placed upon the use of such facilities.
9. Needs specific monitoring requirements.

This code change proposal attempts to address the above reasons/concerns as follows (numbers correspond to above):

1. The new term *lockup area* would be located under I-3 Group classification (Section 308.5) and further limited to "penal or correctional purposes" (Section 308.5.6).
2. The proposed occupant load of 30 would be a compromise between 10 (identified in Tables 1015.1 and 1021.2(2)) which would be too low; and a high of 50 (as modified by the VCC and which is used throughout the IBC for other occupancies, including exit access doors and swings, and Tables 1015.1 and 1021.2(2)), which may be deemed to be too high.
3. Limitations are established by the following:
 - a. Compliance with accessory occupancies (10% of the building area per story).
 - b. Detainee occupant loads would be limited to 120 per *story* – not 200 per *compartment* (from Section 408.6.1), which should further limit the aggregate total of detainees per story.
4. Lockup areas would still be classified as I-3 (per Section 508.2.2), and therefore, must meet all applicable requirements of I-3, including automatic alarm and detection systems, means of egress, doors and locks, and to some extent, separation (refer to Section 408.8.2).
5. Those terms are not used.
6. Smoke barriers would not be required since lockup areas are not sleeping areas, the lockup areas are not "in" an I-3 occupancy, and to ensure clarity, Section 408.6 would be exempted.
7. An NFPA-13 sprinkler system would be required throughout the building or structure.
8. No detainee shall occupy a lockup area more than 12 hours a day – thus avoiding the potential for the need to "sleep" within the lockup area.
9. Monitoring requirements would be as required for any other I-3 occupancy (per Section 508.2.2), including the applicable requirements of Section 408.

NFPA 5000 recognizes the need for such an approach, and includes provisions for such lockup areas.

Construction costs should be reduced (no smoke control system, no need for Type I or IIA construction if lockup areas are on a 3rd floor or higher, and no need to fire-rate the supporting construction since the lockup areas are being treated similar to accessory occupancies and incidental uses) - compared to if I-3 requirements were applied to the rest of the building in which they are located.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Ron Clements _____

Representing: _____

Mailing Address: 9800 Government Center Parkway _____

Email Address: clementsro@chesterfield.gov _____

Telephone Number: (804) 751-4163 _____

Proposal Information

Code(s) and Section(s): Section 716.5.3.1 Smoke and draft control to the IBC _____

Proposed Change (including all relevant section numbers, if multiple sections):

716.5.3.1 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.*

Supporting Statement (including intent, need, and impact of the proposal):

Reason: Virginia has deleted the elevator lobby requirements that were brought into the IBC from the ICBO legacy code. The BOCA legacy code adopted by Virginia prior to the formation of the ICC did not require elevator lobbies or the installation of draft control doors in rated corridors. When the ICC IBC was drafted the smoke and draft control corridor door requirement and the elevator lobby requirement were incorporated into the IBC. The Virginia BHCD evaluated the elevator lobby requirement and determined that the technical basis for requiring elevator lobbies was unfounded and deleted the requirement from the code. The corridor draft control requirement was not specifically evaluated and it remained in the VCC as adopted by the BHCD. One of the original reasons elevator lobbies were instituted into the ICBO Uniform code was because of the corridor draft control door requirement. An elevator door is fire rated but they cannot meet the S label draft control requirement; therefore, an ICBO interpretation was rendered that stated to meet the draft control door requirement elevator doors should be removed from the corridor with elevator lobbies. Later this interpretation evolved in to the codification of elevator lobbies in the ICBO Uniform Code. With elevator lobbies deleted from the VCC a conflict exist by maintaining a requirement that corridor doors opening to elevator hoistways be S labeled smoke doors, because they don't make smoke and draft control rated elevator doors. To comply with the VCC you still need to install an elevator lobby to comply with section 716.5.3.1 if the elevator opens onto a fire rated corridor. This code change will resolve the conflict and meet the full intent of the BHCD decision to delete elevator lobby requirements. Smoke and draft control door requirements for fire rated corridors were not in BOCA and data was never presented to the BHCD supporting adding this new requirement into the VCC. This is also a big expense for mechanical penetrations because it requires any mechanical penetration of a fire rated corridor to be a fire and smoke damper, not a standard fire damper.

Submittal Information

Date Submitted: _____

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Ron Clements

Representing: _____

Mailing Address: 9800 Government Center Parkway

Email Address: clementsro@chesterfield.gov

Telephone Number: (804) 751-4163

Proposal Information

Code(s) and Section(s): Section 716.5.3.1 Smoke and draft control to the IBC

Proposed Change (including all relevant section numbers, if multiple sections):

716.5.3.1 Smoke and draft control. *Fire door assemblies 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.*

Exception: Elevator hoistway doors opening into a fire rated corridor that is not serving as a smoke barrier are not required to meet the requirements for a smoke and draft control door assembly.

Supporting Statement (including intent, need, and impact of the proposal):

Reason: Virginia has deleted the elevator lobby requirements that were brought into the IBC from the ICBO legacy code. The BOCA legacy code adopted by Virginia prior to the formation of the ICC did not require elevator lobbies or the installation of draft control doors in rated corridors. When the ICC IBC was drafted the smoke and draft control corridor door requirement and the elevator lobby requirement were incorporated into the IBC. The Virginia BHCD evaluated the elevator lobby requirement and determined that the technical basis for requiring elevator lobbies was unfounded and deleted the requirement from the code. The corridor draft control requirement was not specifically evaluated and it remained in the VCC as adopted by the BHCD. One of the original reasons elevator lobbies were instituted into the ICBO Uniform code was because of the corridor draft control door requirement. An elevator door is fire rated but they cannot meet the S label draft control requirement; therefore, an ICBO interpretation was rendered that stated to meet the draft control door requirement elevator doors should be removed from the corridor with elevator lobbies. Later this interpretation evolved in to the codification of elevator lobbies in the ICBO Uniform Code. With elevator lobbies deleted from the VCC a conflict exist by maintaining a requirement that corridor doors opening to elevator hoistways be S labeled smoke doors, because they don't make smoke and draft control rated elevator doors. To comply with the VCC you still need to install an elevator lobby to comply with section 716.5.3.1 if the elevator opens onto a fire rated corridor. This code change will resolve the conflict and meet the full intent of the BHCD decision to delete elevator lobby requirements.

Submittal Information

Date Submitted: _____

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information (Check one): Individual Government Entity Company

Name: State Building Code Technical Review Board Representing: _____

Proposal Information

Code(s) and Section(s): Virginia Construction Code, Section 903.2.8

Proposed Change (including all relevant section numbers, if multiple sections):

Change Section 903.2.8 as shown below:

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 in the following Group R-2 occupancies when the necessary water pressure or volume, or both, for the system is not available:

Exceptions:

1. Buildings which do not exceed two stories, including basements which 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. Buildings 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.

For the purposes of applying Exception 1 of Section 1015.1, buildings constructed under the above exceptions shall be entitled to the same allowances as buildings provided with sprinklers in accordance with Section 903.3.1.1 or 903.3.1.2.

Supporting Statement (including intent, need, and impact of the proposal):

The Review Board issued Interpretation No. 26/90 clarifying that buildings constructed under the exceptions to Section 903.2.8 were considered to be equivalent to buildings protected by a sprinkler system for the purposes of applying the single exit building provisions. Under the Review Board's statutory authority, interpretations issued by the Review Board, when deemed appropriate by the Review Board members, are forwarded to the Board of Housing and Community Development as recommendations for future amendments to the code.

Submittal Information

Date Submitted: March 16, 2012



VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual xGovernment Entity Company

Name: Matt Westheimer

Representing: VBCOA Energy Conservation Committee

Mailing Address: 401 Lafayette Street, Williamsburg, VA. 23185

Email Address: mwest@williamsburgva.gov

Telephone Number: 757-220-6135

Proposal Information

Code(s) and Section(s): VCC (IECC Section C402.4.8)

Proposed Change (including all relevant section numbers, if multiple sections):

Change Section C402.4.8 as shown:

Recessed lighting. Recessed luminaires installed in the building thermal envelope shall be sealed to limit air leakage between conditioned and unconditioned spaces. All recessed luminaires shall be IC-rated and labeled as having an air leakage rate or not more 2.0 cfm (0.944 L/s) when tested in accordance with ASTM E 283 at a 1.57 psf (75 Pa) pressure differential. All recessed luminaires installed in the thermal envelope shall be sealed with a gasket or caulk between the housing and interior wall or ceiling covering.

Supporting Statement (including intent, need, and impact of the proposal):

Only Recessed lighting which is installed in the thermal envelope should have to be sealed.

Submittal Information

Date Submitted: 3/21/12 modified 6/25/12

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: taso@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7140 or (804) 371-7150



VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Haywood Kines / Matt Westheimer Representing: VBCOA Energy Conservation Committee

Mailing Address: 5 County Complex Ct. Woodbridge Va. 22192

Email Address: hkines@pwcgov.org Telephone Number: (703) 792-7064

Proposal Information

Code(s) and Section(s): VCC, Section 1301.1.1 of the IBC

Proposed Change (including all relevant section numbers, if multiple sections):

Add an exception to Section 1301.1.1 of the IBC to read

Exception: The following buildings, or portions thereof, separated from the remainder of the building by building thermal envelope assemblies complying with the International Energy Conservation Code shall be exempt from the building thermal envelope provisions of the International Energy Conservation Code:

1. Those with a peak design rate of energy usage less than 3.4 Btu/h · ft² (10.7 W/m²) or 1.0 watt/ft² (10.7 W/m²) of floor area for space conditioning purposes.
2. Those that do not contain conditioned space.

Supporting Statement (including intent, need, and impact of the proposal):

The low energy building exception in the IECC is in its administrative provisions therefore making it unclear whether it applies under the USBC. This amendment will ensure that the exception may be used in the energy provisions of the USBC.

Date Submitted: Modified 6/25/12

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: taso@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7140 or (804) 371-7150



VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Matt Westheimer

Representing: VBCOA Energy Conservation Committee

Mailing Address: 401 Lafayette Street, Williamsburg, VA. 23185

Email Address: mwest@williamsburgva.gov

Telephone Number: 757-220-6135

Proposal Information

Code(s) and Section(s): VCC (IECC C405.1)

Proposed Change (including all relevant section numbers, if multiple sections):

C405.1 General (Mandatory). (no change to text of section)

Exception: Dwelling units within commercial buildings shall not be required to comply with Sections C405.2 through C405.5 provided that not less than 75 percent of the permanently installed ~~light fixtures~~ luminaries, other than low voltage lighting, shall be fitted for, and contain only, high efficacy lamps.

Supporting Statement (including intent, need, and impact of the proposal):

To make the wording when referring to lighting consistent with NEC.

Submittal Information

Date Submitted: 6/25/12

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: taso@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7140 or (804) 371-7150



VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Stephen Turchen

Representing: Virginia Building & Code Officials Association

Mailing Address: Suite 316 / 12055 Government Center Parkway, Fairfax, VA 22035

Email Address: Stephen.turchen@Fairfaxcounty.gov

Telephone Number: 703-324-1653

Proposal Information

Code(s) and Section(s): 2012 IECC Section C405.6

Proposed Change (including all relevant section numbers, if multiple sections):

Change Section C405.6 as shown:

C405.6 Exterior lighting (Mandatory). ~~Where the power for exterior lighting is supplied through the energy service to the building,~~
aAll exterior lighting, other than low-voltage landscape lighting, shall comply with Sections C405.6.1 and C405.6.2.

Exception: Where approved because of historical, safety, signage or emergency considerations.

Supporting statement:

The proposal would have the IECC apply to all exterior lighting, rather than just exterior lighting fed from the electric service of the building. This would eliminate the loophole of using a separate service for the exterior lighting and thereby not have it subject to the code.

Submittal Information

Date Submitted: _____

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: taso@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7140 or (804) 371-7150



VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual X Government Entity Company

Name: Stephen Turchen

Representing: Virginia Building & Code Officials Association

Mailing Address: Suite 316 / 12055 Government Center Parkway, Fairfax, VA 22035

Email Address: Stephen.turchen@Fairfaxcounty.gov

Telephone Number: 703-324-1653

Proposal Information

Code(s) and Section(s): 2012 IECC Section C402.1.1

Proposed Change (including all relevant section numbers, if multiple sections):

C402.1.1 Insulation and fenestration criteria. [Revise last sentence only as follows:]
The thermal envelope of buildings with a vertical fenestration area or skylight area that exceeds that allowed in Table C402.3 shall comply with the building envelope provisions of ANSI / ASHRAE / IESNA 90.1 the maximum area allowed under Sections C402.3.1, C402.3.1.1, or C402.3.1.2, as applicable, shall be evaluated using a software tool as indicated in Sections C407.6, C407.6.1, and C407.6.2.

Supporting Statement (including intent, need, and impact of the proposal):

This change clarifies two important issues when evaluating thermal envelopes of commercial buildings. The prescriptive requirements of thermal envelopes are limited by vertical fenestration area and skylight area. However, these limits are not defined by Table C402.3, but rather in the code language of Sections C402.3 and its sub-sections. Assuming that vertical fenestration and skylight areas are within the allowable limits of the code text, then the prescriptive values of Table C402.3 can be applied. The more critical issue is how to proceed if the stated limits are exceeded. The current paragraph directs the user to building envelope provisions of ASHRAE Standard 90.1; see Section 5 of that standard. Presumably the current IECC intent is that 90.1 / Section 5 be used in lieu of IECC Section C402. This intent conflicts with **C401.2 Applicability**, which tells the IECC user to, effectively, use either the IECC in its entirety or Standard 90.1 in its entirety for commercial buildings; see options 1 and 2 under C401.2. The proposal addresses this potential conflict by directing the IECC user to certain sub-sections of IECC Section **C407 Total Building Performance**. The cited sections under C407.6 allow the user to employ an envelope analysis tool that has been approved by the building official under C407.6.1 ("limited scope"), without getting involved in the more complex full building performance analysis discussed in all of C407. Note that by not directing the IECC user to Section C407 when fenestration / skylight areas are exceeded, another potential conflict with Section C401.2 (Option 3) is also avoided. Impact of the change will help ensure that both designers and code officials have a well-defined enforcement path for all thermal envelope situations in commercial buildings, and that such enforcement will be more uniformly implemented throughout the State.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Stephen Turchen _____

Representing: Virginia Building & Code Officials Association _____

Mailing Address: Suite 316 / 12055 Government Center Parkway, Fairfax, VA 22035 _____

Email Address: Stephen.turchen@Fairfaxcounty.gov _____

Telephone Number: 703-324-1653 _____

Proposal Information

Code(s) and Section(s): 2012 IECC Sections C402.4.5.2 and C403.2.4.4 _____

Proposed Change (including all relevant section numbers, if multiple sections):

C402.4.5.2 Outdoor air intakes and exhausts. [Add the following exception:]

Exceptions:

3. Any grease duct serving a Type I hood installed in accordance with International Mechanical Code, Section 506.3, shall not be required to have a motorized or gravity damper.

C403.2.4.4 Shutoff damper controls. [Add the following exception:]

Exceptions:

3. Any grease duct serving a Type I hood installed in accordance with International Mechanical Code, Section 506.3, shall not be required to have a motorized or gravity damper.

Supporting statement:

These two IECC provisions potentially conflict with the IMC. With few current exceptions, the IECC tries to ensure that every duct or shaft that connects the (conditioned) interior of a commercial building to the (unconditioned) exterior have a damper installed that will prevent unwanted infiltration of outside air. In all cases under the IBC and IMC (except for this one), the open shaft or duct can have an air infiltration damper installed at or near the thermal envelope boundary without compromising health or life safety. However, for grease ducts ventilating Type I hoods installed under the IMC, IMC Section 506.3.7 specifically states, in part, *Duct systems serving a Type I hood shall be constructed and installed so that grease can not collect in any portion thereof ...* An air damper assembly would provide one or several surfaces on which grease could collect. The proposed revisions will avoid potential conflicts between the IECC and IMC and alleviate individual code officials from having to individually interpret this issue. Impact of the change will be to ensure the safety and integrity of grease duct installations.

Submittal Information

Date Submitted: _____

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2009 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Stephen Turchen

Representing: Virginia Building and Code Officials Assoc.

Mailing Address: Suite 316, 12055 Government Center Parkway, Fairfax, VA 22035

Email Address: stephen.turchen@fairfaxcounty.gov

Telephone Number: 703-324-1653

Proposal Information

Code(s) and Section(s): 2012 International Energy Conservation Code; Section C202

Proposed Change (including all relevant section numbers, if multiple sections):
BUILDING THERMAL ENVELOPE. The basement walls, exterior walls, floor, roof, and any other building elements that enclose conditioned space or provide a boundary between conditioned space and exempt or unconditioned space. ADD AT END: An unconditioned space shall include those buildings or spaces, adjacent to a conditioned space, that are not heated or cooled due to periods of non-occupancy, such as an adjacent tenant space.

Supporting Statement (including intent, need, and impact of the proposal):
The proposed change is intended to ensure that the thermal envelope boundary will include the separation between a conditioned space and those spaces which have a reasonable expectation of being unoccupied (and therefore unconditioned) for a significant albeit temporary period of time. Typical commercial building example is a tenant space that is adjacent to a vacant or simply undeveloped tenant space. If the common wall between the tenant spaces is uninsulated, there will be unnecessary heat transfer across that boundary. The proposal will prevent this situation from developing.

There may be cost impacts of this proposal, but they are difficult to gauge. Tenant demising walls are not commonly insulated for energy conservation or to achieve a fire rating, but ARE sometimes insulated for sound transmission attenuation. Sound insulation can serve double duty as an energy insulating product if it meets the required R-value of Table C402.2.

507.2 Where required. A Type I or Type II hood shall be installed at or above all *commercial cooking appliances* in accordance with Sections 507.2.1 and 507.2.2. Where any cooking *appliance* under a single hood requires a Type I hood, a Type I hood shall be installed. Where a Type II hood is required, a Type I or Type II hood shall be installed.

❖ An exhaust system is required for "Commercial cooking appliances," as defined in Chapter 2. In addition to the specific cooking appliances identified in the definition, further examples of commercial cooking appliances that require a commercial kitchen exhaust system are: griddles (flat or grooved); tilting skillets or woks; braising and frying pans; roasters; pastry ovens; pizza ovens; charbroilers; salamander and upright broilers; infrared broilers; and open-burner stoves and ranges. Furthermore, the definition of "Commercial cooking appliances" defines a food service establishment as "any building or portion thereof used for the preparation and serving of food." Within the context of Section 507, the "preparation and serving of food" includes operations such as preparing, handling, cleaning, cooking and packaging foodstuffs of any sort. The obvious examples of a food service establishment are restaurants and school cafeterias. A less obvious example is a church with a fellowship hall that holds fund-raising events, such as spaghetti dinners, fish fries or pancake breakfasts. Even a child day care facility may be loosely classified as a food service establishment if a hot breakfast or lunch is served to the children as part of their care. For a discussion on where a Type I versus Type II hood is required, see the commentary to Section 507.2.1.

A Type I hood must always be installed above a cooking appliance that produces grease or smoke (see commentary, Section 507.2.1). Grease and smoke go hand-in-hand such that where one is present, the other is likely present. The last sentence of this section simply states that either a Type I or II hood may be installed above a cooking appliance that requires only a Type II hood.

507.2.1 Type I hoods. Type I hoods shall be installed where cooking *appliances* produce grease or smoke. Type I hoods shall be installed over *medium-duty, heavy-duty* and *extra-heavy-duty cooking appliances*. Type I hoods shall be installed over *light-duty cooking appliances* that produce grease or smoke.

❖ This section requires Type I hoods for cooking appliances that produce grease or smoke (see definition of "Hood, Type I"). The term "grease" refers to animal and vegetable fats and oils that are used to cook foods or that are a byproduct of cooking foods. Cooking appliances are used for commercial purposes when the appliance is primarily used for the preparation of food for compensation, trade or services rendered. When the nature of the cooking produces grease or smoke then a Type I hood is required. This section makes it clear that a Type I hood is required over medium-duty, heavy-duty and extra-heavy-duty cooking appliances. If there exists a light-duty cooking appliances that pro-

duces grease or smoke, a Type I hood is required for that appliance.

Cooking appliances installed in cafeterias, restaurants, dormitory kitchens, hotels, motels, schools and institutional occupancies are examples of appliances that typically require Type I exhaust hood systems. Some examples of commercial cooking appliances that require a commercial kitchen exhaust system are: deep fat fryers; griddles (flat or grooved); tilting skillets or woks; braising and frying pans; charbroilers; salamander and upright broilers; infrared broilers; open burner stoves and ranges; and barbecue equipment.

A common question that is asked is, what type of hood is required for conveyor and deck-style pizza ovens? Conveyor-type pizza ovens are listed in the definition of "Medium-duty cooking appliances." Type I hoods are required to be installed over medium-duty cooking appliances. Deck-type ovens are listed in the definition of "Light-duty cooking appliances." A Type I hood is required over a light-duty cooking appliance that produces grease or smoke. Considering that a deck-style pizza oven is an enclosed oven and that the primary byproducts given off are heat and moisture, deck-style pizza ovens have commonly been approved for use under a Type II hood.

Unusual circumstances sometimes arise that may warrant a close evaluation of a cooking appliance or a cooking appliance installation before determining whether a Type I hood is required. For example, cooking appliances used in a way that does not produce grease or smoke may need to be equipped only with a Type II hood or, depending on the occupancy where the cooking appliance is located, a residential hood or no hood at all. The key issues in making such determinations are the frequency of use and whether grease is produced by the cooking appliance and the cooking operation. The following are examples of kitchens serving occupancies that, depending on the nature of the cooking and the code official's interpretation of this section, might require only a Type II hood, a residential-type hood or no hood at all for the cooking appliances: church assembly halls; child care facilities; office or factory lunch rooms; employee break rooms; police and fire stations; bed-and-breakfast lodgings; VFW and similar halls; domestic-type kitchens in institutional occupancies; cooking classrooms; cooking demonstration displays and charity soup kitchens.

The code official should examine the frequency, duration and nature of cooking operations before determining whether a Type I or II hood is required for a particular cooking appliance or a cooking appliance installation. Note that this section has been tightened up by stating that a Type I hood must be installed over medium-, heavy- and extra-heavy-duty cooking appliances. Bear in mind the primary purpose of a Type I hood is to control a potential fire hazard associated with grease and the purpose of a Type II hood is to control waste heat and moisture that burden HVAC systems and promote an unhealthy workplace. Excess moisture can deteriorate building components,

promote the growth of mold and fungi, and create unhealthy and uncomfortable working conditions for employees.

Some common scenarios that come up are the type of hoods that are required in a life science classroom in a high school (i.e., a classroom used to teach, among other things, cooking to students) and the type of hood required over a cooking appliance(s) in a fire station. In both cases, the type of cooking is the deciding factor on the type of hood required.

Typically, students in a life science class are learning to prepare meals that are the same as those that are prepared for a family in a residential dwelling unit. In most cases, residential-type range/ovens are installed in the classroom. As such, the same byproducts that are produced in a kitchen in a dwelling unit would be produced in the classroom. Based on the residential style of cooking that is being taught, it would seem appropriate that the same type of hood installed in a residential dwelling could be installed over the residential range/ovens used in a classroom. Therefore, a Type I or II hood would not be required and residential kitchen hoods that are ducted to the outdoors could be installed.

Note that if the high school offers a culinary arts class and uses commercial cooking appliances to teach students how to prepare meals that are normally prepared in a restaurant, then the appropriate Type I or II hood could be required based on the type of cooking operations that are performed under the hood.

In the case of a kitchen located in a fire station, once again it depends on the type of cooking and the intended use of the facility. Meals prepared in a kitchen in a fire station that has a residential-type range/oven that is only intended to be used to prepare meals for the fire fighters on that particular shift is similar, if not the same, as those prepared in a home environment. As such, the same byproducts that are produced in a kitchen in a dwelling unit would be produced in the kitchen in the fire station. Based on the residential style of cooking that is being performed, it would seem appropriate that the same type of hood installed in a residential dwelling could be installed or, in a case where the space meets its ventilation requirements in Chapter 4 of the code, no hood at all.

It is not uncommon, however, for fire stations to have a community room with a kitchen used for preparing meals. The community room is often used to hold fund-raising events, such as spaghetti dinners, fish fries or pancake breakfasts, or used by members of the community for special events, such as parties or weddings. The kitchen may or may not have commercial cooking appliances installed. In this case, it would appear that such a situation is intended for the preparation of food for revenue generation. In this case, a Type I or II hood is required based on the cooking operations that are performed under the hood. This would also apply to VFW and other fraternal organizations, church assembly halls and other similar halls.

It is important to note that cooking appliances in-

stalled in commercial occupancies do not necessarily require the installation of a Type I or II hood. There are a number of installations in a commercial occupancy where residential-type cooking occurs that would not require a commercial kitchen hood (see the discussion above for school classrooms and fire stations). Lunchrooms and breakrooms in commercial businesses often have residential ranges/ovens installed. In addition, many multiple-family residential buildings (e.g., condominiums and townhomes) have a clubhouse or community room that the residents can reserve for special functions. Typically these are seldom used, and when they are, it is to warm food or bake frozen food like pizza, lasagna or premade appetizers. Based on the residential style of cooking that is performed on these appliances, it would seem appropriate that the same type of hood installed in a residential dwelling could be installed or there may be no hood at all.

If multiple cooking appliances are installed under a single hood and one or more of those appliances requires a Type I hood, a Type I hood would be required to serve the entire appliance line.

With the trend for larger kitchens in new dwelling units, kitchens designed with commercial-type cooking appliances have become more popular. Although these installations would generally not require commercial exhaust hoods, commercial appliances should be carefully evaluated for use in dwellings. Commercial cooking appliances are typically not listed for domestic use and might lack certain safety features that would be required for domestic cooking appliances. Note that Sections 917.2 and 917.3 require appliances in dwelling units to be designed and listed for domestic use (see commentary, Sections 917.2 and 917.3).

This chapter does not require exhaust hoods for cooking equipment or appliances installed outdoors where the grease-laden vapors, etc., discharge directly to the outside atmosphere, nor does this chapter intend to regulate cooking appliances installed in vehicles or towed trailers (see definition of "Commercial cooking appliances"). Note that cooking appliances installed outdoors but located under a roof should be evaluated for installation under a Type I or II hood just as if they were located inside a building having enclosing walls.

507.2.1.1 Operation. Type I hood systems shall be designed and installed to automatically activate the exhaust fan whenever cooking operations occur. The activation of the exhaust fan shall occur through an interlock with the cooking appliances, by means of heat sensors or by means of other *approved* methods.

- ❖ This section and Section 507.1 states that the hood system must operate whenever cooking operations are taking place. In order to perform the intended function, a Type I hood is required to automatically operate when cooking operations occur or must be activated in an arrangement that prevents cooking without hood exhaust system operation. There are several methods indicated to achieve this and it is left up to the de-

signer/installer/owner and code official to determine what they all agree will be necessary to verify that fan operation will occur whenever cooking operations occur.

The activation of the exhaust fan must occur through an interlock with the appliances, by means of heat sensors or other approved methods. It should be noted that an interlock with the cooking appliances is one of the methods to accomplish this, but is not the only method. This text has been misinterpreted as meaning that all appliances must be fitted with controls that would start the hood system. This is not the case. In fact, tampering/altering with listed and labeled appliances may in itself create a code violation. However, if a cooking appliance has provisions incorporated into its listed and labeled design that included some type of interlock option, that would certainly meet the requirements of this text.

It should be pointed out that the text states that "hood systems shall be designed and installed..." and this means that the hood system needs the controls and not necessarily the actual cooking appliances. The hood system must cooperate with appliances by means of heat sensors or other approved methods. All this means is that something needs to activate the exhaust fan when a cooking operation takes place. This can be achieved through the use of controls such as heat sensors/infrared technology, light beam interference detection or through methods such as electric relays that control the branch circuit that the appliances are connected to or, in the case of gas appliances, a solenoid valve in the gas supply piping. This section does not prevent manual starting of the exhaust system, provided that there is a means to prevent cooking appliance operation when the exhaust system is not operating (e.g., hood and appliance interlock).

The last part of this code text leaves the door open to just about anything by saying, "or by other approved methods." This leaves it up to the designer/installer/owner and code official to determine what will be necessary to verify that fan operation will occur whenever cooking operations take place. One way might be to tie the fan to the lighting control serving the kitchen area, assuming that the cooking would not be possible if the lights were off. This option may work very well because of the allowance that permits the use of variable speed exhaust fans (see commentary, Section 507.1). So, when the lights are turned on the fan might not even be running, but when cooking operations begin the heat created would cause the fan to begin to run on a light load condition. This variable speed technology already has the interlock incorporated into it, which is how the fan knows to automatically change speeds throughout the day. Another "approved" method may be one that some of the chain restaurants use in which the standard operating procedure is that the fan always runs when the building is occupied or upon startup of any cooking appliance.

507.2.2 Type II hoods. Type II hoods shall be installed above dishwashers and *light-duty appliances* that produce heat or moisture and do not produce grease or smoke, except where the heat and moisture loads from such appliances are incorporated into the HVAC system design or into the design of a separate removal system. Type II hoods shall be installed above all *light-duty appliances* that produce products of *combustion* and do not produce grease or smoke. Spaces containing cooking appliances that do not require Type II hoods shall be ventilated in accordance with Section 403.3. For the purpose of determining the floor area required to be ventilated, each individual *appliance* that is not required to be installed under a Type II hood shall be considered as occupying not less than 100 square feet (9.3 m²).

❖ Type II hoods are required above dishwashers and light-duty appliances that produce heat or moisture and do not produce grease or smoke, except where the heat or moisture loads are incorporated into the HVAC system (see Figure 507.2.2). Where light-duty cooking appliances produce products of combustion and do not produce grease or smoke they must be located under a Type II hood. Where a dishwasher or a light-duty appliance has a separate removal system that is specific to that appliance, and it discharges the heat or moisture to the exterior, a Type II hood is not required. Any light-duty cooking appliance that produces grease or smoke must be located under a Type I hood (see commentary, Section 507.2.1).

In previous editions of the code, there were a number of exceptions that did not require a Type II hood over light-duty electric cooking appliances, such as convection, bread and microwave ovens; toasters; steam tables; popcorn poppers and coffee makers as long as the additional heat and moisture loads were accounted for in the design of the HVAC system. This laundry list of exceptions kept growing with every code change cycle until the list of appliances that did not require a hood nearly exceeded the list that required a hood. With this edition of the code, the exceptions are gone and replaced with criteria that are twofold; (1) is heat or moisture produced? (2) are the heat and moisture loads accounted for in the design of the HVAC system? If heat and moisture are produced and the loads are incorporated into the HVAC design, then no Type II hood is required. If heat and moisture is produced and the loads are not incorporated into the HVAC design, then a Type II hood would be required. Note that if a Type II hood is not required, there is no limit to the number of electric appliances that can be installed as long as the loads from all the appliances are accounted for in the HVAC design. The designer should consider if it is more energy efficient to design the HVAC system to handle the heat and moisture loads or if it is more efficient to provide a Type II hood and makeup air. Since the code permits either option, the designer must make the decision on which design is more energy efficient. Outside weather conditions, the number of appliances, the heat and moisture loads

generated and hours of operation may all be factors that help decide which option is more energy efficient.

If light-duty cooking appliances are provided and a Type II hood is not required, the space where the appliances are located must be ventilated in accordance with Table 403.3. The space where these appliances are installed should be considered to be a kitchen for the purpose of applying Table 403.3. The ventilation rate for kitchens is 0.7 cfm/ft² of exhaust, so to apply this rate, each individual light-duty appliance is considered as occupying 100 square feet. The purpose of this requirement is to provide a minimal amount of exhaust in the area where one or more of these appliances are installed. If the light-duty appliances are installed in a typical commercial kitchen where the kitchen ventilation rate is being applied to the whole space, then the area of the kitchen would be used to determine the ventilation rate without adding the additional 100 ft² for each light-duty appliance. Note however, if the kitchen is small and the number of light-duty appliances multiplied by 100 square feet is greater than the area of the kitchen, the exhaust rate for the kitchen must be based on the area calculated in accordance with this section.

507.2.3 Domestic cooking appliances used for commercial purposes. Domestic cooking appliances utilized for commercial purposes shall be provided with Type I or Type II hoods as required for the type of appliances and processes in accordance with Sections 507.2, 507.2.1 and 507.2.2.

❖ Domestic cooking appliances used for commercial purposes are considered commercial appliances and

are therefore subject to the requirements of Sections 507.1 and 507.2. For example, food catering services that work out of a residential kitchen must have Type I or II hoods. Again, it is important for the code official to examine the frequency, duration and nature of the cooking operation(s) before determining whether an exhaust hood is required for a particular kitchen facility. Note that just because a domestic cooking appliance is installed in a commercial building does not mean that the domestic appliance is being used for commercial purposes (see commentary, Section 507.2.1).

507.2.4 Extra-heavy-duty. Type I hoods for use over *extra-heavy-duty cooking appliances* shall not cover *heavy-, medium- or light-duty appliances*. Such hoods shall discharge to an exhaust system that is independent of other exhaust systems.

❖ "Extra-heavy-duty cooking appliances" are defined as appliances that utilize solid fuel for all or part of the heating source for cooking. The creation of air-borne sparks and embers is potentially hazardous and typical of a solid fuel-burning cooking operation. Oftentimes, Type I hoods serving solid fuel-burning cooking appliances require the installation of spark arrester devices ahead of the grease removal device to minimize the possibility of passing these sparks and embers into the grease removal device, and possibly into the hood and duct system. To minimize the potential for spreading fire, air-borne sources of ignition or grease-laden vapors to other exhaust systems, Type I hoods for use over solid fuel-burning cooking appliances must dis-



Figure 507.2.2
TYPE II HOOD ABOVE A DISHWASHER
(Photo courtesy of Guy McMann)

charge to independent exhaust systems that do not connect to any other exhaust system.

Without complete isolation, the smoke, fire and ignition hazards of the effluent developed by solid fuel-burning kitchen exhaust systems might not be confined to the kitchen exhaust system and could jeopardize other systems and other parts of the building. The exclusion of other appliances is consistent with NFPA 96 and is intended to prevent hot embers or sparks emitted from extra-heavy-duty cooking appliances from igniting grease or oils present on or in heavy-, medium- or light-duty cooking appliances. For example, a deep fat fryer would not be permitted under the same hood since it is a medium-duty appliance. Two extra-heavy-duty cooking appliances would be permitted to be installed next to each other and under the same Type I hood. NFPA 96 addresses solid fuel-cooking operations in detail, including inspection and cleaning operations, fuel storage and handling and ash removal.

507.3 Fuel-burning appliances. Where vented fuel-burning appliances are located in the same room or space as the hood, provisions shall be made to prevent the hood system from interfering with normal operation of the *appliance vents*.

❖ A significant reduction in building pressure could be created by hood systems, exhaust fans, ventilation systems and similar equipment, which can negatively affect appliance vents and chimneys. Fuel-burning appliances are often in competition with other mechanical equipment or systems for the available combustion air that infiltrates the building envelope or is otherwise

introduced into a building, room or space. The competition between powered exhaust equipment and natural-draft fuel-fired appliances is an unfair contest; the powered equipment will starve the natural-draft appliances unless provisions are made to compensate for the effect of the powered exhaust equipment. Natural-draft appliances also compete among themselves for combustion air. The appliance that produces the strongest draft, such as a solid fuel appliance, can cause combustion air shortages for the appliances that produce a weaker draft.

Exhaust fans and similar equipment and appliances can produce significant negative building pressures that can interfere with the operation of vents and chimneys. This interference can cause reverse flow as outdoor air enters the building through the vents and chimneys as a result of the pressure difference. Any such interference with vents or chimneys would cause discharge of combustion products into the building and, therefore, must be avoided. The amount of combustion air provided could be inadequate or nullified where there is no compensation for the effect of appliances or equipment removing air from a room or space. In many cases, additional combustion air or makeup air must be supplied to offset the deficiency. For example, in restaurants it is common to find fuel-fired appliances such as water heaters that are spilling combustion products into the kitchen area because of the negative pressure created by the kitchen exhaust fan (see Figure 507.3). Direct-vent appliances are a wise choice in commercial kitchens to avoid venting problems.

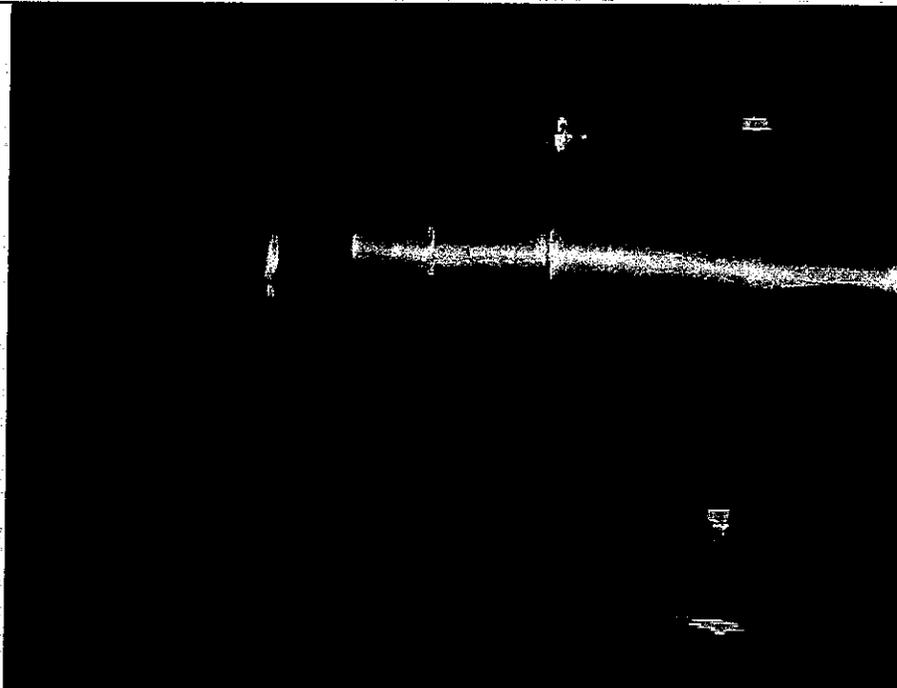


Figure 507.3
WATER HEATER NEXT TO A TYPE I HOOD
(Photo courtesy of Guy McMann)

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information (Check one): Individual Government Entity Organization

Name: J. Kenneth Payne, Jr., AIA

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Proposal Information

Code(s) and Section(s): **2009 IMC, Section 507**

Proposed Change (including all relevant section numbers, if multiple sections):

Add Exception 4 to IMC 507.1 as follows:

507.1 General. Commercial kitchen exhaust hoods shall comply with the requirements of this section. Hoods shall be Type I or II and shall be designed to capture and confine cooking vapors and residues. Commercial kitchen exhaust hood systems shall operate during the cooking operation.

Exceptions:

1-3 [unchanged]

4. Residential labeled, and listed hood can be provided in lieu of Type I or Type II hood when all of the following conditions are met:
 1. Appliance under the hood shall be residential labeled, and listed.
 2. Appliance under the hood shall be a single light-duty cooking appliance.
 3. Appliance under the hood shall be electric.
 4. Appliance under the hood shall have no more than six burners for any one appliance within any one room or space.
 5. Hood shall be ducted and exhausted directly to the exterior of the building, and cannot recirculate within the room, space, or building.
 6. Heat and moisture loads shall be incorporated into the HVAC system design or separate removal system.
 7. Room or space in which the hood is located shall be sprinklered in accordance with Section 903.3.
 8. Room or space in which the hood is located shall be equipped with a Class K-rated portable fire extinguisher within 30 feet of travel distance from the appliance under the hood.
 9. Room or space in which the hood is located shall be equipped with a manual fire alarm system in accordance with Section 907.
 10. Room or space in which the hood is located shall be equipped with an automatic smoke detection system in accordance with Section 907.
 11. Hood shall not penetrate the finished ceiling.

Supporting Statement (including intent, need, and impact of the proposal):

Currently, the interpretation and application of when a Type I or II hood is required for "residential" type appliances in different occupancy classifications is inconsistent. This has created numerous issues with designers and owners designing to meet the *intended* function of the cooking appliance, only to be required to provide a Type I or II hood, or request a code modification to avoid having to provide a Type I or II hood. Oftentimes, a "residential" cooking appliance within a "commercial" facility is classified by the building official or fire official as a "commercial" cooking appliance – thus typically requiring a Type I or II hood – where a "residential" hood should otherwise be sufficient.

Selected excerpts from the 2009 IBC Commentary are repeated below:

The following are examples of kitchens serving occupancies that, depending on the nature of the cooking and the code official's interpretation of this section, might require only a Type II hood, a residential-type hood or no hood at all for the cooking appliances: church assembly halls; child care facilities; office or factory lunch rooms; employee break rooms; police and fire stations; bed-and-breakfast lodgings; VFW and similar halls; domestic-type kitchens in institutional occupancies; cooking classrooms; cooking demonstration displays and charity soup kitchens.

Some common scenarios that come up are the type of hoods that are required in a life science classroom in a high school (i.e., a classroom used to teach, among other things, cooking to students) and the type of hood required over a cooking appliance(s) in a fire station. In both cases, the type of cooking is the deciding factor on the type of hood required.

Typically, students in a life science class are learning to prepare meals that are the same as those that are prepared for a family in a residential dwelling unit. In most cases, residential-type range/ovens are installed in the classroom. As such, the same byproducts that are produced in a kitchen in a dwelling unit would be produced in the classroom. Based on the residential style of cooking that is being taught, it would seem appropriate that the same type of hood installed in a residential dwelling could be installed over the residential range/ovens used in a classroom. Therefore, a Type I or II hood would not be required and residential kitchen hoods that are ducted to the outdoors could be installed.

In the case of a kitchen located in a fire station, once again it depends on the type of cooking and the intended use of the facility. Meals prepared in a kitchen in a fire station that has a residential-type range/oven that is only intended to be used to prepare meals for the fire fighters on that particular shift is similar, if not the same, as those prepared in a home environment. As such, the same byproducts that are produced in a kitchen in a dwelling unit would be produced in the kitchen in the fire station. Based on the residential style of cooking that is being performed, it would seem appropriate that the same type of hood installed in a residential dwelling could be installed or, in a case where the space meets its ventilation requirements in Chapter 4 of the code, no hood at all.

It is important to note that cooking appliances installed in commercial occupancies do not necessarily require the installation of a Type I or II hood. There are a number of installations in a commercial occupancy where residential-type cooking occurs that would not require a commercial kitchen hood. Lunchrooms and breakrooms in commercial businesses often have residential ranges/ovens installed. In addition, many multiple-family residential buildings (e.g., condominiums and townhomes) have a clubhouse or community room that the residents can reserve for special functions. Typically these are seldom used, and when they are, it is to warm food or bake frozen food like pizza, lasagna or premade appetizers. Based on the residential style of cooking that is performed on these appliances, it would seem appropriate that the same type of hood installed in a residential dwelling could be installed or there may be no hood at all.

The proposed code change attempts to take into account the highlighted context of the Code Commentary along with concerns expressed previously by building and/or fire officials to find a means by which a "residential-type" hood could be installed over a "residential-type" cooking appliance within a "commercial" facility – by requiring a multitude of conditions to be met.

Submittal Information

Date Submitted: ~~August 3, 2012~~ August 9, 2012

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: taso@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7140 or (804) 371-7150



VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Skip Harper

Representing: Louisa County

Mailing Address: PO Box 160 Louisa, Va. 23093

Email Address: sharper@louisa.org

Telephone Number: 540-967-3414

Proposal Information

Code(s) and Section(s): 2012 VMC 507.2.3

Proposed Change (including all relevant section numbers, if multiple sections):

507.2.3 Domestic cooking appliances used for commercial purposes.
Domestic cooking appliances utilized for commercial purposes shall be provided with Type I or Type II hoods as required for the type of appliances and processes in accordance with Sections 507.2, 507.2.1 and 507.2.2.
Exception: One four burner cooking appliance installed in Places of Worship (A-3) that is not associated with day care centers, education, or homeless shelters shall comply with 505.1

Supporting Statement (including intent, need, and impact of the proposal):

Intent is to eliminate a type I or II exhaust system for a single stove that will have less use than the average single family dwelling on a daily basis. A Place of Worship might use this appliance twice a week for light cooking. Please note this is intended for one appliance only and limited to four burners for the simple fact that most residential stoves are four burners. Places of Worship come in all sizes with different numbers of members however the majority of these across The State are small in size and this change is intended for them. Bigger Places of Worship often have commercial kitchens intended to be used with day care facilities, education, and homeless shelters and as such 507.2.3 would apply.

Submittal Information

Date Submitted: 8/10/12

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
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VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Organization

Name: J. Kenneth Payne, Jr., AIA

Representing: VSAIA

Mailing Address: 3200 Norfolk Street, Richmond, VA 23230

Email Address: kpayne@moseleyarchitects.com

Telephone Number: 804.794.7555

Proposal Information

Code(s) and Section(s): **2012 IBC, Chapter 11**

Proposed Change (including all relevant section numbers, if multiple sections):

Revise Chapter 11 as follows:

**SECTION 1101
GENERAL**

1101.1 Scope. The provisions of this chapter shall control the design and construction of facilities for accessibility to physically disabled persons.

1102.2 Design. Buildings and facilities shall be designed and constructed to be accessible in accordance with this code and 2004 Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines (2004 ADAAG).

**SECTION 1102
DEFINITIONS**

**SECTION 1103
SCOPING REQUIREMENTS**

**SECTION 1104
ACCESSIBLE ROUTE**

**SECTION 1105
ACCESSIBLE ENTRANCES**

**SECTION 1106
PARKING AND PASSENGER LOADING FACILITIES**

**SECTION 11027
DWELLING UNITS AND SLEEPING UNITS**

[Renumber entire section from 1107.n to 1102.n]

**SECTION 1108
SPECIAL OCCUPANCIES**

**SECTION 11039
OTHER FEATURES AND FACILITIES**

11039.1 General. *Accessible* building features and facilities shall be provided in accordance with Sections 11039.2 through 11039.344.

Exception: *Accessible units, Type A units and Type B units* shall comply with Chapter 10 of ICC A117.1.

~~**1109.2 Toilet and bathing facilities.**~~ [delete this Section in its entirety without substitution]

11039.2.4 Family or assisted-use toilet and bathing rooms. [renumber this Section; remainder of this Section is unchanged]

~~1109.2.2 through 1109.13.1:~~ Delete in their entirety without substitution.

~~**11039.343 Fuel-dispensing systems.**~~ Fuel-dispensing systems shall be *accessible*.

~~1109.15 through 1109.15.4.5:~~ Delete in their entirety without substitution.

**SECTION 110410
SIGNAGE**

[Renumber entire section from 1110.n to 1104.n]

If renumbering the subsequent Sections poses a problem due to cross referencing throughout the I-Codes, the Sections could retain their original numbers (similar to what was done with Chapter 34 by the VCC, where multiple sections were deleted without renumbering).

All other *applicable* references throughout the I-Codes to ICC A117.1 would need to be replaced with 2004 ADAAG.

Supporting Statement (including intent, need, and impact of the proposal):

Currently, designers and owners must comply with codes (IBC Chapter 11), standards (ICC A117.1), and regulations (2010 ADA Standards, incorporating the 2004 ADAAG) when it comes to accessibility. Although they try to mimic each other, differences do remain. Therein lies the problem. They are not exactly alike, and this leaves designers and owners in a potential bind. An owner can get a Certificate of Occupancy (CO), but the owner, and in some cases, the architect, may be sued through the ADA civil law. But, typically, if the design meets ADAAG, an owner can get a CO, while protecting themselves (and the A/E) from potential accessibility lawsuits.

The IBC has been trying to mimic ADAAG as far as "scoping" is concerned. They are close, but not identical. Most of the differences involve residential related construction. ICC A117.1 is now nearly identical with ADAAG, but for a few minor differences. Both the IBC and A117.1, together, have achieved "safe harbor" from the DoJ.

- Virginia also adopted Appendix E Supplementary Accessibility requirements to get closer to ADAAG

ADA is the law of the land. Owners and A/E's can design to meet the IBC and A117.1, but the bottom line – all designs need to meet ADAAG, or liability and lawsuits possibly await including the potential of millions of dollars in damages and remedial alterations.

Given that almost, if not all Virginia public K-12 schools (Title III), most governmental buildings (Title II) and some commercial entities (Title III) receive Federal dollars or subsidies in some form, or are otherwise regulated by the Federal government - the DoJ has determined that those entities that receive Federal dollars must comply with the ADA Standards or forfeit the Federal dollars. Therefore, many school districts and others are undertaking ADA audits and having to spend thousands, if not millions, of Commonwealth of Virginia dollars to satisfy the ADA Standards.

It is important to understand that only the 2004 ADAAG are being proposed to replace ICC A117.1 – not the full 2010 Standards or the actual ADA civil law itself. The 2004 ADAAG incorporates both the scoping (similar to the function IBC Chapter 11 serves) and technical/graphic guidelines (similar to the function ICC A117.1 serves) – not the text or language of the civil law.

So, if IBC Chapter 11 (which building officials enforce) is trying to mimic ADAAG for scope, and ICC A117.1 (which building officials enforce) is trying to mimic ADAAG for technical/graphical guidelines – it would appear building officials should be able to enforce the scoping and guideline requirements of the 2004 ADAAG. This proposal does not ask building officials to interpret the civil law itself.

- BCOM, through the CPSM, has been utilizing the 2004 ADAAG (scoping and guidelines only) for accessibility requirements in all Virginia colleges and universities since 2004 – without any known enforcement issues
- So, a precedent has already been established in Virginia for utilizing ADAAG for accessibility requirements for over 8 years w/o any known (to the best of my knowledge and belief) civil lawsuits against BCOM (i.e., building officials) or Virginia's colleges and universities that has since been designed utilizing ADAAG

IBC Chapter 35 is full of references to other standards for design. Are they all written in "enforceable code language?" Incorporating the 2004 ADAAG would be no different.

For those elements that are not addressed in ADAAG would still need to be covered by the IBC, and can be included in Chapter 11 as they are currently.

Where the ADAAG includes unenforceable language or incorrect references (e.g., ADAAG 105.2.4 references 2000, 2001, and 2003 IBC), the VCC could amend those, if necessary – or we could include a "blanket" provision that would address those concerns.

All three documents (IBC, A117.1, and ADAAG) are as close to being identical as they may ever be. Enforcing ONE document (2004 ADAAG) rather than TWO (IBC and A117.1) for building officials – and designing to ONE document (2004 ADAAG) rather than all THREE for owners and A/E's – just makes sense.

Every effort should be made to simplify regulations and thereby reduce the possible conflicting interpretations and/or ensuing conflicts. Any such advancement toward that goal should also improve public safety, health, and welfare.

One final comment:

It is unknown at this time, whether an entity (may be a small private business or a major corporation) who receives subsidies through the Affordable Care Act (ergo, Federal dollars) would then be required to comply with the ADA Standards – which in the case of existing buildings, would become retroactive. If Virginia decides to utilize ADAAG as its accessibility requirements, it may well save potentially millions of dollars throughout the Commonwealth, since those entities constructing newer buildings and structures would already comply with the ADA Standards.

Submittal Information

Date Submitted: August 9, 2012

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: taso@dhcd.virginia.gov
Fax Number: (804) 371-7092
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CHAPTER 412
REGULATIONS FOR LICENSURE OF ABORTION FACILITIES

Part VII
Design and Construction

12VAC5-412-380. Local and state codes and standards.

Abortion facilities shall comply with state and local codes, zoning and building ordinances, and the Uniform Statewide Building Code. In addition, abortion facilities shall comply with Part 1 and sections 3.1-1 through 3.1-8 and section 3.7 of Part 3 of the 2010 Guidelines for Design and Construction of Health Care Facilities of the Facilities Guidelines Institute, which shall take precedence over the Uniform Statewide Building Code pursuant to Virginia Code § 32.1-127.001.

Entities operating as of the effective date of these regulations as identified by the department through submission of Reports of Induced Termination of Pregnancy pursuant to 12VAC5-550-120 or other means and that are now subject to licensure may be licensed in their current buildings if such entities submit a plan with the application for licensure that will bring them into full compliance with this provision within two years from the date of licensure.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Frank Castelvechi, III PE

Representing: County of Henrico Building Inspections

Mailing Address: PO Box 90775, Henrico VA 23273

Email Address: cas13@co.henrico.va.us

Telephone Number: 804 501 4375

Proposal Information

Code(s) and Section(s): IBC and IFC [F] 907.2.3

Proposed Change (including all relevant section numbers, if multiple sections):

[F] 907.2.3 Group E.

A manual fire alarm system that ~~initiates~~ activates the occupant notification ~~signal utilizing an emergency voice/alarm communication~~ system meeting the requirements of Section 907.5.2.2 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 ~~30~~ 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 ~~emergency voice/alarm communication~~ occupant notification system will activate on sprinkler water flow and manual activation is provided from a normally occupied location.

Supporting Statement (including intent, need, and impact of the proposal):

This proposed change is to maintain the requirements currently in the 2009 USBC for educational occupancies. Requiring a voice alarm system for educational uses will impose significant unnecessary costs to daycares and school systems that are already short of funds. Most schools already have public address systems that can be used for emergency notification. No other occupancy requires voice alarms until you reach 1000 occupants or a high rise building.

Changing the threshold from 50 to 30 would impose this requirement on most school trailers and small daycare centers by moving the classroom size from 1000 sq ft to 600 sq ft. Requiring an expensive voice alarm system in a school trailer or small storefront daycare center is a ludicrous imposition of significant costs to schools and small businesses.

There is no record of fire deaths and injuries in these occupancies to justify these added expenses. The children in these occupancies are required to be under competent adult supervision.

Submittal Information

Date Submitted: 9/28/12

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR SBCO (State Building Codes Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: Vernon.hodge@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7150



VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual x Government Entity Company

Name: Frank Castelvechi, III PE

Representing: County of Henrico Building Inspections

Mailing Address: PO Box 90775, Henrico VA 23273

Email Address: cas13@co.henrico.va.us

Telephone Number: 804 501 4375

Proposal Information

Code(s) and Section(s): VA Construction code 903.2.7 base document

Proposed Change (including all relevant section numbers, if multiple sections):

~~E. Change 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 m²).~~
- ~~2. A Group M fire area is located more than three stories above grade plane.~~

Supporting Statement (including intent, need, and impact of the proposal):

This proposed change is to go with the language in the 2012 IBC IFC now that ICC has fixed the unreasonable zero threshold for this more hazardous merchandise and replaced it with a more reasonable 5000 sq ft threshold for upholstered furniture and mattresses.

Submittal Information

Date Submitted: 9/28/12

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR SBCO (State Building Codes Office)
600 East Main Street
Suite 300
Richmond, VA 23219

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VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Haywood Kines

Representing: Haywood Kines

Mailing Address: 5 County Complex Ct. Woodbridge, Va. 22192

Email Address: hkines@pwcgov.org

Telephone Number: (703) 792-7064

Proposal Information

Code(s) and Section(s): 2011 NEC Art. 700, Section 700.12 (F) Excp. #2

Proposed Change (including all relevant section numbers, if multiple sections):

~~Art. 700 Section 700.12(F) Exception No. 2 Remote heads providing lighting 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.~~

Art. 700 Section 700.12(F) Exception No. 2 Where the normal power branch circuits that supply luminaries 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.

Supporting Statement (including intent, need, and impact of the proposal):

The Emergency lighting is required under the 2012 IBC Chapter 10 Section 1006 at all required Exits. This new exception as written in the NEC creates multiple situations for the required exterior Emergency lighting to fail to provide the Emergency lighting. The Exterior Normal lighting can be fed from a separate Service point or fed from a separate Metered Tenant Feeder. The loss of partial power to the building, power failure in Feeders, circuits, or equipment failure could create situations where public exiting the building would be directed to areas without any illumination to the Public Way. This lighting can be provided with Listed Luminaries that provide both normal and emergency lighting and small Inverters/UPS systems on the House lighting circuits that feeds typical wall packs provided by the Building owner. Under the U.S.B.C. we have the opportunity to correct the wording for power source to lighting which would assure the required Emergency lighting per IBC Chapter 10 Section 1006 will be provided in any emergency situation.

Submittal Information

Date Submitted: _____

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Haywood Kines

Representing: IAEI Va. Chapter

Mailing Address: 5 County Complex Ct. Woodbridge Va. 22192 Suite #120

Email Address: hkines@pwcgov.org

Telephone Number: (703) 792-7064

Proposal Information

Code(s) and Section(s): 2011 NEC Article 334, Uses Permitted Section 334.10

Delete U.S.B.C. Section 2701.1.1 Changes to NFPA 70

1. The following changes Shall be made to NFPA 70:

~~(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~~

Replace with

NEC Art. 334, Section 334.10

(2) Multifamily dwellings permitted to be of Types III, IV and V construction except as prohibited in 334.12,

(3) Other structures permitted to be of Types III, IV and V construction except as prohibited in 334.12. 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.

Supporting Statement (including intent, need, and impact of the proposal):

The 2011 NEC has added new changes to 334.10, New (5) Types I and II construction where installed with-in raceways permitted to be installed in Types I and II construction. This change provides a greater flexibility for contractors in the use of NM cables that exceeds the USBC amendment in previous codes.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Christopher H. Born, P.E.

Representing: Clark Nexsen, P.C.

Mailing Address: 4444 Revere Drive, Virginia Beach, VA 23456

Email Address: cborn@clarknexsen.com

Telephone Number: 757-644-8581

Proposal Information

Code(s) and Section(s): IBC 905.2

Proposed Change (including all relevant section numbers, if multiple sections):

Revise wording of current exception in the VUSBC to read as follows: "Exception: Manual wet standpipe systems as per NFPA 14 shall be permitted in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and where the highest floor level is not more than 150 feet above the lowest level of fire department vehicle access. The system shall be designed so that residual pressure and volume requirements of NFPA 14 can be satisfied by pumping through the fire department connection utilizing fire department apparatus of a capacity and maximum pressure as specified by the fire code official."

Supporting Statement (including intent, need, and impact of the proposal):

When originally written for the 2000 VUSBC, I believe this change was intended to capture the allowance of NFPA 14 that permitted manual wet systems. However, the exception only mentioned pressure and not volume. Therefore, while the VUSBC actually addressed something that was already permitted in part in NFPA 14 (elimination of the minimum pressure) it technically required a minimum volume even though NFPA 14 didn't.

Additionally as currently written the exception technically does not require any minimum pressure, even when the system is supplied through the fire department connection. This change will clarify that the system must be capable of satisfying the hydraulic requirements when supplied through the FDC, and indicates that the fire code official shall be consulted regarding the capabilities and standard procedures of the fire department.

Submittal Information

Date Submitted: August 20, 2012

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information (Check one): Individual Government Entity Company

Name: Chris Snidow Representing: Self

Mailing Address: P.O. Box 90775 Henrico Virginia 23273

Email Address: sni@co.henrico.va.us Telephone Number: 804.501.4363

Proposal Information

Code(s) and Section(s): IBC Section 2308 CONVENTIONAL LIGHT-FRAME CONSTRUCTION

Proposed Change (including all relevant section numbers, if multiple sections):

SECTION 2308 "CONVENTIONAL LIGHT-FRAME CONSTRUCTION"
Revise 2308.3.2.2 as follows:

First Paragraph, third sentence:
"Blocking at *of* rafters *is required above braced wall panels. All blocking* used need not be full depth..."
Third Paragraph, first sentence:
"...lateral forces shall be transferred from the roof diaphragm to the braced wall over the full length of the braced wall ~~line~~ *panel* by blocking..."

Supporting Statement (including intent, need, and impact of the proposal):
Revision of IBC to make it congruent with requirements of IRC Chapter 6.

Submittal Information

Date Submitted: June 11, 2012

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: taso@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7140 or (804) 371-7150



VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Chris Snidow Representing: Self

Mailing Address: P.O. Box 90775 Henrico, VA 23273

Email Address: sni@co.henrico.va.us Telephone Number: 804.501.4363

Proposal Information

Code(s) and Section(s): IBC Section 2308

Proposed Change (including all relevant section numbers, if multiple sections):

SECTION 2308 "CONVENTIONAL LIGHT-FRAME CONSTRUCTION"
Paragraph 2308.2 "Limitations"
Item 3.2 "Live loads shall not exceed 40 PSF (1616 N/m²) for floors."
ADD: "Exception: Concrete slab-on-grade live load limited only by allowable soil bearing pressure."

Supporting Statement (including intent, need, and impact of the proposal):

Clarifies intent of CLFC limitations as concrete slab on grade construction is independent of the foundations below and prescriptive wood framing above.

Submittal Information

Date Submitted: June 11, 2012

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
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Email Address: taso@dhcd.virginia.gov
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VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Organization

Name: J. Kenneth Payne, Jr., AIA

Representing: VSAIA

Mailing Address: 3200 Norfolk Street, Richmond, VA 23230

Email Address: kpayne@moseleyarchitects.com

Telephone Number: 804.794.7555

Proposal Information

Code(s) and Section(s): **2012 IBC, Section 3412.2.2**

Proposed Change (including all relevant section numbers, if multiple sections):

Add an exception to Section 3412.2.2 of the IBC to read:

Exception: Plumbing, mechanical and electrical systems in buildings undergoing a partial change of occupancy shall be subject to any applicable requirements of Section 103.3 of this code.

Supporting Statement (including intent, need, and impact of the proposal):

This exception was added to Section 3412.2.1 for a change of occupancy as part of the VCC. It would appear the same exception should also be considered for a *partial* change of occupancy if it is allowed for a *complete* change of occupancy.

Although one may suggest a *partial* change of occupancy is still a change of occupancy and therefore, is already covered by Section 3412.2.1, this proposed code change would, in that case, clarify the same exception would apply to just a *partial* change of occupancy and there would be no ambiguity as to its enforcement or interpretation. However, if it was the intent that Section 3412.2.1 also covers Section 3412.2.2, then Section 3412.2.2 should be renumbered 3412.2.1.1 – thus becoming a subsection of Section 3412.2.1. If this were renumbered, then this code change could be modified as such and the existing exception would then clearly apply to both a complete or *partial* change in occupancy.

Submittal Information

Date Submitted: August 3, 2012

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

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VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information (Check one): Individual Government Entity Organization

Name: J. Kenneth Payne, Jr., AIA Representing: VSAIA

Mailing Address: 3200 Norfolk Street, Richmond, VA 23230

Email Address: kpayne@moseleyarchitects.com Telephone Number: 804.794.7555

Proposal Information

Code(s) and Section(s): **2012 IBC, Section 1403.2**

Proposed Change (including all relevant section numbers, if multiple sections):

Add the following subsection to 1403.2 as follows:

1403.2 Weather protection. Exterior walls shall provide the building with a weather-resistant *exterior wall envelope*. The *exterior wall envelope* shall include flashing, as described in Section 1405.4. The *exterior wall envelope* shall be designed and constructed in such a manner as to prevent the accumulation of water within the wall assembly by providing a *water-resistive barrier* behind the exterior veneer, as described in Section 1404.2, and a means for draining water that enters the assembly to the exterior. Protection against condensation in the *exterior wall* assembly shall be provided in accordance with Section 1405.3.

Exceptions: [no changes]

1403.2.1 Air barrier. The *exterior wall envelope* shall be designed and constructed in such a manner as to prevent the infiltration and exfiltration of air through the wall assembly by providing an air barrier assembly. Air barrier materials shall comply with Section C402.4.1.2.1 of the *International Energy Conservation Code*. Air barrier wall assemblies shall comply with Section C402.4.1.2.2 of the *International Energy Conservation Code*.

Supporting Statement (including intent, need, and impact of the proposal):

Although Section [E] 1301.1.1.1 requires buildings to be designed and constructed in accordance with the IECC, something as critical as an air barrier assembly should not be left to a reference in Chapter 13 – especially since it is a critical component of an exterior wall assembly, thus making it better suited to Chapter 14.

An attempt was made to include the air barrier language within Chapter 14 of the 2012 IBC; however, it was “Disapproved” by the Fire Safety Code Committee at the 2012 ICC Code Development Hearing in Dallas, because they felt it belonged in the IECC.

However, 2012 IBC Chapter 14 includes references to other exterior wall assembly components such as, flashings, water resistive barriers, and vapor retarders. Certainly, an air barrier should warrant at least a nominal mention in the IBC Chapter 14 to avoid it from possibly being missed. By limiting this code change proposal to just a reference within Chapter 14, it still addresses the reason for disapproval by keeping everything in the IECC.

Although it may have been more logical to locate this reference elsewhere in Chapter 14 (e.g., Section 1403.3 or Section 1404.3), that would have involved renumbering the entire sections and cross referencing to other locations within all of the I-Codes. It was not located within Section 1403.2, because then the exceptions would apply, and it does not appear the exceptions are supposed to apply to air barrier assemblies.

Submittal Information

Date Submitted: August 3, 2012

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: taso@dhcd.virginia.gov
Fax Number: (804) 371-7092
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VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

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Telephone Number: 804.794.7555

Proposal Information

Code(s) and Section(s): **2012 IBC, Section 1007.1, Exception 1**

Proposed Change (including all relevant section numbers, if multiple sections):

1007.1 Accessible means of egress required. Accessible means of egress shall comply with this section. Accessible spaces shall be provided with not less than one accessible means of egress. Where more than one means of egress are required by Section 1015.1 or 1021.1 from any accessible space, each accessible portion of the space shall be served by not less than two accessible means of egress.

Exceptions:

1. Accessible means of egress are not required to be provided in alterations to existing buildings.
2. One accessible means of egress is required from an accessible mezzanine level in accordance with Section 1007.3, 1007.4 or 1007.5.
3. In assembly areas with sloped or stepped aisles, one accessible means of egress is permitted where the common path of travel is accessible and meets the requirements in Section 1028.8.

Supporting Statement (including intent, need, and impact of the proposal):

This proposed code change E36-12 was "Approved as Submitted" by the Means of Egress Code Committee at the 2012 ICC Code Development Hearing in Dallas. The accompanying supporting statement, in part, is repeated below:

The intent is to revise Section 1007.1 for consistency with the language in IBC 3411.6, and IEBC 410.6 and 705.

1. *The language in these three sections reads as follows:*
2. *Accessible means of egress required by Chapter 10 of the International Building Code are not required to be provided in existing facilities.*

The text in 1007.1 could be read to require accessible means of egress in existing buildings undergoing a change or occupancy. While there may be situations where accessible means of egress should be provided in existing buildings, this must be addressed separately. It was not the intent of the provisions in the four sections in the IBC and IEBC to have different requirements.

As long as the existing means of egress (MOE) is not made worse, the 2009 IEBC does not require *accessible* means of egress for:

- Repairs (504.1 and 505.1)
- Level 1 alterations (604.1 and 605.1, Exception 2)
- Level 2 alterations (706.1 which sends you back to 605)
- Level 3 alterations (806.1 which sends you back to 605 and 706 – which sends you back to 605)
- *Partial* change of occupancy (906.1 sends you to 912.8 – 912.8.1 sends you to 605 and 706)
- Relocated or moved buildings
- Historic buildings do not require accessibility unless undergoing a *complete* change of occupancy (as it sends you back to 912.8)

Only when you get to a *complete* change of occupancy is something required for accessibility – and it is not all about means of egress

So, it appears the IEBC does not require *accessible* MOE unless distinct circumstances are met, for repairs, partial change of occupancies, historic buildings, and relocated buildings

- But the current 2012 IBC 1007.1 implies that *accessible* MOE are not required only for alterations,

Therefore, since Chapter 34 and the IEBC also address repairs, change of occupancy, historic buildings, and relocated or moved buildings, it could be interpreted that *accessible* means of egress would apply to those scopes of work, since the current language addresses only alterations. A correction is warranted.

Also, it is important to draw a distinction between *accessible* MOE and MOE

- The 20% rule applies to accessibility to a primary function and mostly deals with an accessible route (including site elements and signs) to the *primary function areas* and its associated toilets and drinking fountains
- Accessible MOE applies to an *entire* building and/or site elements

Submittal Information

Date Submitted: ~~August 3, 2012~~ August 6, 2012

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Telephone Number: 804.794.7555

Proposal Information

Code(s) and Section(s): **2012 IBC, Section 908.7**

Proposed Change (including all relevant section numbers, if multiple sections):

Add Exception 2 to Section 908.7 as follows:

[F] 908.7 Carbon monoxide alarms. Group I or R occupancies located in a building containing a fuel-burning appliance or in a building which 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 *International Mechanical Code* shall not be considered an attached garage.

Exceptions:

1. *Sleeping units or dwelling units* which do not themselves contain a fuel-burning appliance or have an attached garage, but which 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 which contains a fuel-burning 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.
2. *Sleeping units or dwelling units* which do not themselves contain a fuel-burning appliance, but which are located in a building with a fuel-burning appliance, need not be equipped with single-station carbon monoxide alarms provided that:
 1. Spaces or areas containing fuel-burning appliances shall be enclosed and constructed with fire barriers in accordance with Section 707; and
 2. Spaces or areas containing fuel-burning appliances are ventilated in the same manner as an open parking garage as defined in Chapter 2, or ventilated in accordance with Section 404 of the *International Mechanical Code*.

Supporting Statement (including intent, need, and impact of the proposal):

If an entire story or building is not required to be provided with CO alarms when you have an enclosed ventilated or open parking garage, then the same approach should be allowed for spaces or areas that may have such fuel-fired appliances, but are themselves enclosed and ventilated, or open – the same that is allowed for those garages.

Which is safer?

1. A vented fireplace or
2. A vented gas water heater, or
3. A running car in an open, unventilated garage, or
4. A running car in a ventilated enclosed garage

The proposed code change would allow a communal vented gas fireplace or vented grille in a dormitory or hotel without requiring sensors throughout the entire building or story, while being no less safe than if that building or story were adjacent to an open or vented parking garage.

Under Exception 1, all sleeping or dwelling units that are on the same story as a space that contains a fuel-burning appliance would require CO alarms, even if those units were hundreds of feet away, and/or down a corridor that turns 90-degrees and runs another hundred feet.

Under the scenario above, Exception 2 allows for the omission of the CO alarms at the units if the space containing the fuel-burning appliances is enclosed with fire barriers and either open or ventilated like an enclosed garage.

Submittal Information

Date Submitted: August 3, 2012

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

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VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Organization

Name: J. Kenneth Payne, Jr., AIA

Representing: VSAIA

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Telephone Number: 804.794.7555

Proposal Information

Code(s) and Section(s): **2012 IBC, Section 806.1.2, Exception 1**

Proposed Change (including all relevant section numbers, if multiple sections):

Revise Exception 1, add new Exception 2, and renumber Exception 2 to Exception 3, as follows:

[F] 806.1.2 Combustible decorative materials. The permissible amount of *decorative materials* meeting the flame propagation performance criteria of NFPA 701 shall not exceed 10 percent of the specific wall or ceiling area to which it is attached.

Exceptions:

1. In auditoriums or similar types of spaces in Group A, the permissible amount of decorative material meeting the flame propagation performance criteria of NFPA 701 shall not exceed 75 percent 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 803.11.
2. In auditoriums or similar types of spaces in Group A, the permissible amount of fabric partitions suspended from the ceiling and not supported by the floor, and meeting the flame propagation performance criteria of NFPA 701 shall not exceed 75 percent of the aggregate wall area where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
3. The amount of fabric partitions suspended from the ceiling and not supported by the floor in Group B and M occupancies shall not be limited.

Supporting Statement (including intent, need, and impact of the proposal):

Outside of a proscenium curtain (which is addressed in Section 410.3.5), it appears you would not be able to install any other type of curtain in an auditorium or other similar types of spaces (such as recital, rehearsal, and dance halls/studios) where the curtains exceed 10%, unless you could utilize Section 806.1.2, Exception 1.

However, Exception 1 as currently written requires compliance with Section 803.11.

- Section 803.11 involves *interior finishes*, not *decorative materials*, but it appears the exception treats *decorative materials* as *interior finishes* due to its reference to installation requirements within Section 803.11
 - So, are curtains considered a *decorative material* or an *interior finish* (or maybe even a wall or partition – in which case the code change would look closer to the current Exception 2)?
 - If an *interior finish*, then Section 806 would not be applicable at all
 - Therefore, the code must intend *decorative materials* (in this case, curtains) are not an *interior finish* – even if it exceeds 10%
- If we must then meet Section 803.11 for the installation of curtains:
 - Curtains are not directly attached to a substrate, so 803.11.1 would not be applicable
 - Curtains are not furred construction, so 803.11.1.1 would not be applicable
 - Curtains are not dropped ceilings, so 803.11.2.1 would not be applicable
 - Curtains do not entail heavy timber construction, so 803.11.3 would not be applicable
 - Curtains are not directly applied to a wall, ceiling, or structural element, so 803.11.4 would not be applicable
 - That leaves 803.11.2 – set out construction; however, curtains are not considered walls (or are they?) or ceilings, so it would appear 803.11.2 is not applicable
 - Even if curtains had to be installed per 803.11.2
 - Curtains, as a loose material, are not tested in accordance with ASTM E84 or UL 723 (which tests materials against walls or ceilings), so 803.1.1 would not be applicable
 - The code Commentary even states, the tests are not applicable to materials that are not capable of supporting themselves, or of being supported
 - Curtains, as a loose material and a textile, are not tested in accordance with NFPA 286 (room corner test), so 803.1.2 would not be applicable
 - So, how can you comply with set-out construction when your decorative material (curtain) is not tested per the referenced sections?

Therefore, the code change proposal:

1. Maintains Exception 1 for those decorative materials that would not be considered curtains/draperies.
2. Exceptions 1 and 2 include other locations where curtains are typically required, including A-1 facilities other than just auditoriums (which is not listed under Section 303 Assembly Group A), and similar type of spaces in A-3 (e.g., dance, rehearsal, and recital halls and studios).
3. New Exception 2 allows for those situations where you may have curtains such as borders, walk-arounds, travelers, cycloramas, etc., that exceed 10% and you want to utilize the exception, but could not due to the installation requirements of 803.11 – by deleting the installation requirements of 803.11.
4. New Exception 2 uses the same terminology found in 806.1.2, Exception 2 (now #3) rather than using the term “curtains” or “draperies.”
5. All exceptions still require compliance with NFPA 701, which should be the only criteria *decorative materials* or fabric partitions should meet; otherwise, if they had to meet ASTM E84, UL 723, or NFPA 286, then they should not be considered *decorative materials*, and they should be considered *interior finishes* or walls.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

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Proponent Information (Check one): Individual Government Entity Organization

Name: J. Kenneth Payne, Jr., AIA Representing: VSAIA

Mailing Address: 3200 Norfolk Street, Richmond, VA 23230

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Proposal Information

Code(s) and Section(s): **2012 VCC, Section 915**

Proposed Change (including all relevant section numbers, if multiple sections):

**SECTION 915
IN-BUILDING EMERGENCY COMMUNICATIONS COVERAGE**

915.1 General. For localities utilizing public safety wireless communications, dedicated empty 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, and additions, in accordance with this section. This Section shall not require improvements of the existing public safety communication systems.

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 Type 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. Where approved by the building official, a wired communication system in accordance with Section 907.2.13.2 shall be permitted to be installed in lieu of an in-building emergency communication coverage system.
7. Existing buildings and portions of existing buildings undergoing repairs, alterations, a partial change of occupancy, or receiving additions; or relocated or moved buildings.

915.2 Design and technical criteria. The building official or fire official shall provide a document to the owner or their representative indicating the specific technical information and requirements for the emergency responder radio coverage system. This document shall contain, but not be limited to, the various frequencies required, the location of radio sites, effective radiated power of radio sites, anticipated emergency communication equipment, size of operational space within the building, and other supporting technical information necessary to provide compliance with this Section.

915.2.1 Preliminary meeting. When requested by the owner or their representative, or when determined necessary by the building official or fire official, the building official and fire official shall meet with the owner or their representative prior to the application for a permit to discuss the requirements for the emergency responder radio coverage system, equipment, empty infrastructure, and responsibilities for providing same.

915.31.4 Installation. The building owner shall install provide a dedicated empty infrastructure to accommodate the emergency communication equipment identified in the document provided in accordance with Section 915.2, or identified in the preliminary meeting. radiating cable, such as coaxial cable or equivalent. The empty infrastructure shall consist of radiating cable shall be installed in dedicated conduits, raceways, or cable trays, as well as available space in or on plenums, attics, interstitial spaces, or roofs, compatible for these specific installations as well as other applicable provisions of this code; and have the ability to be extended or modified without destructive demolition. The locality shall be responsible for the installation of any additional the emergency communication equipment required for the operation of the system.

915.41.2 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 in accordance with the document provided in accordance with Section 915.2, or identified in the preliminary meeting, to allow the locality access to and the ability to operate the in-building emergency communication equipment.

915.51.3 Inspection. In accordance with Section 113.3, all installations shall be inspected prior to concealment.

915.62 Acceptance test. Upon completion of the 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, at no cost to the owner, to verify that the required level of radio coverage in accordance with Section 915.6.1 is available present at no cost to the owner. Any noted deficiencies in the installation of the radiating cable empty infrastructure or operational space shall be provided in an inspection report to the owner or the owner's representative.

915.6.1 Radio signal strength. The building shall be considered to have acceptable emergency responder radio coverage when signal strength measurements in 95 percent of all areas on each floor of the building meet the signal strength requirements in Sections 915.6.1.1 and 915.6.1.2.

915.6.1.1 Minimum signal strength into the building. A minimum signal strength of -95 dBm shall be receivable within the building.

915.6.1.2 Minimum signal strength out of the building. A minimum signal strength of -95 dBm shall be received by the agency's radio system when transmitted from within the building.

915.6.2 Compliance. Should the inspection report under Section 915.6 note deficiencies, the building owner shall correct such deficiencies within 60 days of receiving the results of the inspection report. Deficiencies noted in the initial inspection report shall not be a condition to withhold the certificate of occupancy.

Supporting Statement (including intent, need, and impact of the proposal):

Infrastructure (i.e., oftentimes understood to mean *empty* conduits, *empty* cable trays, *empty* raceways, *empty* spaces, etc.) by its nature cannot "perpetuate" the operations of any system. It can "accommodate," but not perpetuate (i.e., to last for an indefinite time, or continue without interruption) the in-building emergency communications (IBEC). The *equipment* can perpetuate the system, not the *infrastructure*.

To clarify, the charging paragraph includes additions – since technically, additions are non-separated portions of existing buildings. Also, to ensure this section is not applied in a retrofit manner, the last sentence of Section 915.1 was added, and mimics the language included in the 2012 IFC Section 510.1.

Exception #6 mimics 2012 IFC Section 510.1, Exception 1.

Exception #7 clarifies that these requirements do not apply to existing buildings undergoing any type of rehabilitation, other than a *complete* change of occupancy. The term “new” is being interpreted by a number of building officials as including an *existing* building undergoing alterations or a *partial* change of occupancy.

Section 915.1.1 (Installation) is modified to clarify that only an *empty* infrastructure is required to be provided by the owner. Also, as currently proposed for 2012, a conflict exists. Other portions of this Section imply that the emergency communication equipment will be provided by the locality. The 2012 VCC definition of *emergency communication equipment* includes radiating cable systems (refer to definition below). However, as currently written, Section 915.1.1 (Installation) requires the owner to provide the radiating cable (or equivalent). The revision deletes the conflict.

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.

The list of possible infrastructure elements has been expanded and clarified. By including a requirement for the infrastructure to be provided in such a way that would allow for modifications without destructive demolition should lessen the potential for increased remedial costs.

Currently, Section 915.2 (Acceptance test) required compliance with “the required level of radio coverage;” however, there was no criteria established in the building code for what “level of radio coverage” was required. Therefore, the added/modified Sections 915.2 and 915.6.1 attempt to establish requirements for a *minimum* level of coverage, which can be modified if necessary as a result of the document provided to the owner under Section 915.2 and/or the preliminary meeting under Section 915.2.1. Both the document and/or preliminary meeting will assist the owner and RDP during their design process to confirm the infrastructure will comply with this section and allow for the equipment, operation, and maintenance provided by the locality. Currently, the level of radio coverage is an “open book” that oftentimes does not get verified until *after* the owner occupies the building, or *just before* a Certificate of Occupancy is applied for – and by then, it is too late to implement cost-effective changes.

Relocating the “at no cost to owner” clarifies that the “no cost” relates to the locality’s *field tests*, not the level of radio coverage – which may actually end up costing additional money if the signal strength and/or coverage are not sufficient.

Section 915.6.1 and its subsections mimic the requirements in 2012 IFC Section 510.4.1.

Section 915.6.2 was added to prevent the locality from denying occupancy due the result of noted deficiencies, provided those deficiencies are remedied within 60 days. If the locality did not want to issue a certificate of occupancy, they could issue a temporary certificate of occupancy until such time the deficiencies are remedied.

The formatting revisions reflect the approach typically done throughout the code where there is an initial “charging” paragraph (“General”) and any subsequent *technical* paragraphs are not subparagraphs of the charging paragraph.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
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(Check one): Individual Government Entity Organization

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Proposal Information

Code(s) and Section(s): **2012 IBC, Section 1001.4**

Proposed Change (including all relevant section numbers, if multiple sections):

Delete Section 1001.4 in its entirety without substitution:

~~**1001.4 Fire Safety and Evacuation Plans.** Fire safety and evacuation plans shall be provided for all occupancies and buildings where required by the *International Fire Code*. Such fire safety and evacuation plans shall comply with the applicable provisions of Sections 401.2 and 404 of the *International Fire Code*.~~

Supporting Statement (including intent, need, and impact of the proposal):

Given the requirements of IFC 404, everything (evacuation plan procedures, assigned personnel, lockdown plans, training, maintenance, availability, and distribution) is operational related, and would be information an owner would need to prepare, submit, coordinate, and obtain ultimate approval from the fire official. This includes subsequent updates to the plans.

Since this requirement deals exclusively with operational procedures and not building construction, this requirement should remain in the IFC.

Submittal Information

Date Submitted: August 3, 2012

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Proposal Information

Code(s) and Section(s): **2012 IBC, Section 508.2.3**

Proposed Change (including all relevant section numbers, if multiple sections):

508.2.3 Allowable building area and height. The allowable *building area and height* of the building containing accessory occupancies shall be based on the allowable *building area and height* for the main occupancy in accordance with Section 503.1. ~~The height of each accessory occupancy shall not exceed the tabular values in Table 503, without increases in accordance with Section 504 for such accessory occupancies.~~ The *building area* of the accessory occupancies shall be in accordance with Section 508.2.1.

Supporting Statement (including intent, need, and impact of the proposal):

This proposed code change G126-12 was "Approved as Submitted" by the General Code Committee at the 2012 ICC Code Development Hearing in Dallas. The accompanying supporting statement is repeated below:

The current text of 508.2.3 literally limits the location of an accessory occupancy in a building to the tabular height in Table 503 for the occupancy of the accessory occupancy. Imposing this limit is a total contradiction to what the accessory occupancy design option was intended to allow. When literally applied, an office building of Type IIC construction that is allowed to be 4 stories in height with sprinklers, could not have closets or storage rooms above the 2nd story as they are a Group S-1 (storage) occupancy and the tabular height limit in Table 503 is 2 stories.

And I emphasize "tabular" height limit because as the code is currently written, no height increase can be taken for a fully sprinklered building used when determining the vertical location of an accessory occupancy.

Another example would be linen storage rooms (Group S-1) in hotels of Type IIB construction. Based on Table 503 the tabular building height limit (in stories) for a Group S-1 occupancy is 2 stories, where the hotel (Group R-2) is allowed to be up to 5 stories when sprinklered. Because Group S-1 occupancies are not allowed above the 2nd story, linen storage closets would not be allowed above the 2nd story – a hotel cannot literally function without those storage spaces.

Without this code change many building designs as we know them today would continue to literally not be allowed.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
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Proposal Information

Code(s) and Section(s): **2012 IPC, Section 405.3.2**

Proposed Change (including all relevant section numbers, if multiple sections):

405.3.2 Public lavatories. In employee and public toilet rooms, the required lavatory shall be located in the same room as the 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.

Supporting Statement (including intent, need, and impact of the proposal):

This code change proposal was "Approved as Submitted" by the Plumbing Code Committee at the 2012 ICC Code Development Hearing in Dallas. The reasoning is repeated below:

This has been a long standing practice in school construction. It is geared towards helping educate children on the importance of personal hygiene. This arrangement also allows for group wash fixtures to be located adjacent to core toilet rooms. This allows the instructors to wait outside and assure the children wash their hands upon exit of the toilet room. More commonly, it permits the installation of the lavatory to be located within the classroom when water closets are installed in the classroom itself. So when a child uses the facilities they walk through a single door (no different in concept to exiting a typical toilet stall) into the classroom where the instructor can assure hands are washed.

This will almost always result in cost savings. Currently, in situations where a toilet room with a lavatory is provided within a classroom (as is required for grades PK-1 in Virginia, and oftentimes is also provided for other grades and Special Education classrooms), a sink must also be provided within the classroom itself for training and other general functions and purposes – thus requiring two lavs/sinks per classroom/space. By allowing the lavatory to be within the classroom, the sink could be omitted, thus saving costs multiplied by the number of classrooms/spaces requiring such lavs/sinks.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Organization

Name: J. Kenneth Payne, Jr., AIA

Representing: VSAIA

Mailing Address: 3200 Norfolk Street, Richmond, VA 23230

Email Address: kpayne@moseleyarchitects.com

Telephone Number: 804.794.7555

Proposal Information

Code(s) and Section(s): **2012 VCC, Section 703.7**

Proposed Change (including all relevant section numbers, if multiple sections):

703.7 Fire-resistance assembly marking. Concealed ~~Where there is an accessible concealed floor, floor-ceiling or attic space, fire walls, vertical fire separation assemblies, fire barriers, fire partitions, and 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 which 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."

Supporting Statement (including intent, need, and impact of the proposal):

This is similar language which was "Approved as Submitted" by the Fire Safety Code Committee at the 2012 ICC Code Development Hearing in Dallas. The accompanying supporting statement, in part, is repeated below:

Section 703.7 was meant to require that the markings on fire-resistance rated assemblies only where there is an accessible space. This proposal modifies the code language to state that requirement more clearly. As written, this section requires the marking to be located in a concealed accessible space, so it requires construction of a concealed space where one would not otherwise be installed.

The term "fire separation assemblies" is no longer a defined term in the VCC (legacy term from BOCA days); therefore, it should be deleted. Since shaft enclosures and stairways are required to be constructed with fire barriers, those are already covered by the charging language.

Since there may be situations where a protected opening may be required by provisions of the code other than those found in Chapter 7, the added language "or any other wall . . ." would address those occurrences.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information (Check one): Individual Government Entity Organization

Name: J. Kenneth Payne, Jr., AIA Representing: VSAIA

Mailing Address: 3200 Norfolk Street, Richmond, VA 23230

Email Address: kpayne@moseleyarchitects.com Telephone Number: 804.794.7555

Proposal Information

Code(s) and Section(s): **2012 IBC [P] Table 2902.1 and equivalent Table in the 2012 IPC**

Proposed Change (including all relevant section numbers, if multiple sections):

Add Footnote 'h' to Table 2902.1 as follows:

A-5 ^d	Stadiums, amusement parks, bleachers and grandstands for outdoor sporting events and activities	1 per 75 for the first 1,500 and 1 per 120 for the remainder exceeding 1,500	1 per 40 for the first 1,520 and 1 per 60 for the remainder exceeding 1,520	1 per 200	1 per 150	—	1 per 1,000	1 service sink
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h. See Section 2902.1.1 for allowable reduction in minimum number of required water closets and lavatories for Group E buildings and structures.

Revise 2902.1.1 and add subsection 2902.1.1 as follows:

[P] 2902.1.1 Fixture calculations. To determine the *occupant load* of each sex, the total *occupant load* shall be divided in half. To determine the required number of fixtures, the fixture ratio or ratios for each fixture type shall be applied to the *occupant load* of each sex in accordance with Table 2902.1. Fractional numbers resulting from applying the fixture ratios of Table 2902.1 shall be rounded up to the next whole number. For calculations involving multiple occupancies, such fractional numbers for each occupancy shall first be summed and then rounded up to the next whole number.

Exceptions:

1. The total *occupant load* shall not be required to be divided in half where *approved* statistical data indicate a distribution of the sexes of other than 50 percent of each sex.
2. For outdoor sporting events and activities at Group E buildings or structures, the minimum number of required water closets and lavatories may be reduced by no more than 50% provided all of the following are met:
 - a. Approval is granted by the building official.
 - b. Approved statistical data indicating an occupant load less than the occupant load determined by this code.
 - c. The remaining minimum number of required water closets, based on the anticipated actual occupant load in attendance at the time of the event or activity, shall be provided by portable toilets equipped with hand sanitizers or hand-washing capabilities.

Supporting Statement (including intent, need, and impact of the proposal):

This code change proposal addresses those situations where a high, middle, or elementary school has provided spectator seating (e.g., bleachers), but having to provide the minimum number of plumbing fixtures becomes cost prohibitive and becomes a burdensome task – especially in localities where the water must be supplied by a well and/or pump.

Historically, the fixed seating facilities are at capacity no more than a handful of times per year; yet, the minimum plumbing fixtures factors result in a vast number of plumbing fixtures that remain unused for 6 months or more out of a year. Oftentimes, draining of the water lines is required to avoid freezing, or traps must be continually primed, or the heat must be run in an unoccupied building to avoid the freezing of pipes, or a combination of all of the above and other maintenance related procedures.

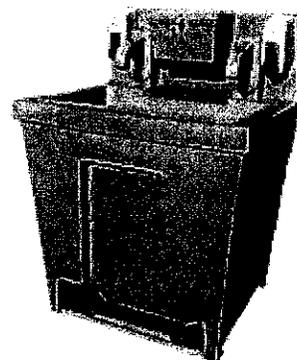
On those occasions where the occupant load does exceed the number of plumbing fixtures provided, portable toilets would be allowed to make up the difference – but for no more than 50%. For example, say a high school would like to provide bleacher seating for 3,000 people, per Table 2902.1 (A-5) the following minimum number of plumbing fixtures must be provided:

- Per Section 2902.1.1, divide occupant load by half = 1,500 male and 1,500 female
 - 1,500 male: 20 water closets + 8 lavatories
 - 1,500 female: 38 water closets + 10 lavatories
- Per the proposed code change, allow for up to a 50% reduction in water closets and lavatories
 - Male: 10 water closets + 4 lavatories
 - Female: 19 water closets + 5 lavatories
 - Portable toilets would need to make up the difference in water closets *only* (hand washing would be handled by sanitizers or washing stations)
 - 29 portable toilets would be required when the occupant load reaches 3,000 occupants
 - If more than 3,000 people attended the outdoor event, then more portable toilets would be required to make up the difference.
 - Conversely, if only 2,000 people attended, then only 10 portable toilets would be required
 - 1,000 male: 14 water closets + 5 lavatories
 - 1,000 female: 25 water closets + 7 lavatories

Portable toilets are allowed for numerous outdoor events and activities. It seems only reasonable that similar accommodations could be allowed for schools. The cost savings could be substantial in both initial and life cycle (maintenance) costs.



Portable toilets



Hand washing station

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information (Check one): Individual Government Entity Organization

Name: J. Kenneth Payne, Jr., AIA Representing: VSAIA

Mailing Address: 3200 Norfolk Street, Richmond, VA 23230

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Proposal Information

Code(s) and Section(s): **2012 IBC, Table 509 Incidental Uses**

Proposed Change (including all relevant section numbers, if multiple sections):

Add small Storage Rooms back to incidental use table as follows (no other changes to the Table are part of this proposal):

**TABLE 509
INCIDENTAL USES**

ROOM OR AREA	SEPARATION AND/OR PROTECTION
Storage rooms 100 square feet or less	1 hour or provide automatic sprinkler system

Supporting Statement (including intent, need, and impact of the proposal):

Until recently, it has always been implied that small storage rooms 100 SF or less were considered part of the main occupancy, (1) by its inclusion in the legacy BOCA codes, and (2) since storage rooms over 100 SF were included in the "incidental use" table through the 2006 IBC. However, in the 2009 IBC, storage rooms were removed from the Table and now must be classified as S-1 or S-2, and addressed as an accessory, non-separated mixed use, or separated mixed use.

This becomes problematic when there may be small storage rooms that now must be classified as S-1 or S-2 on upper floors. For example, when applying mixed use in B occupancy buildings of IIB or IIA construction, an S-1 storage room cannot be placed above the 3rd floor in accordance with Table 503 and Section 504.

This code change proposal adds back the previous legacy recognition that *small* storage rooms 100 SF or less could be considered an "incidental use" within the main occupancy in which they are located. They would still need to be separated with rated construction or provided with a sprinkler system. Storage rooms *greater than* 100 SF would still need to be classified as S-1 or S-2, and addressed accordingly.

A similar code change (G42-12) was "Approved as Submitted" by the General Code Committee at the 2012 ICC Code Development Hearing in Dallas. In that proposal, such small storage rooms were classified as "accessory" spaces, however, they did at least recognize that an option other than classifying them as S-1 or S-2 was necessary to deal with such *small* storage rooms.

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Organization

Name: J. Kenneth Payne, Jr., AIA

Representing: VSAIA

Mailing Address: 3200 Norfolk Street, Richmond, VA 23230

Email Address: kpayne@moseleyarchitects.com

Telephone Number: 804.794.7555

Proposal Information

Code(s) and Section(s): **2012 IBC, Section 1009.1**

Proposed Change (including all relevant section numbers, if multiple sections):

1009.1 General. Stairways serving occupied portions of a building shall comply with the requirements of this section.

Exception: Stairways that do not serve as an exit or provide access to an exit do not need to comply with Sections 1009.2 and 1009.3.

Supporting Statement (including intent, need, and impact of the proposal):

Clarification is needed to ensure the provisions of Section 1009.2 or 1009.3 are not applied to stairways other than winders, spiral, curved, or alternating. All other provisions for stairways would still apply.

For example, a building may have a "monumental" stairway that is not an exit or an exit access stairway. The code change proposal attempts to avoid the interpretation that the stairway must still be designed to meet either an exit or exit access stairway, since Section 1009.1 could be interpreted that all stairways must comply with 1009.2 or 1009.3.

Submittal Information

Date Submitted: August 3, 2012

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: taso@dhcd.virginia.gov

Fax Number: (804) 371-7092

Phone Numbers: (804) 371-7140 or (804) 371-7150



VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information (Check one): Individual Government Entity Organization

Name: J. Kenneth Payne, Jr., AIA Representing: VSAIA

Mailing Address: 3200 Norfolk Street, Richmond, VA 23230

Email Address: kpayne@moseleyarchitects.com Telephone Number: 804.794.7555

Proposal Information

Code(s) and Section(s): **2012 IBC, Section 1022.5**

Proposed Change (including all relevant section numbers, if multiple sections):

1022.5 Penetrations. Penetrations into and openings through interior exit stairways and ramps are prohibited except for required exit doors, 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 be no 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 stairways and ramp. Such penetrations shall be protected in accordance with Section 714.3.2.
2. Through-penetrations shall be permitted for primary and secondary structural framing other than columns. Such penetrations shall be protected in accordance with Section 714.3.1.

Supporting Statement (including intent, need, and impact of the proposal):

Structural framing is allowed to penetrate other rated assemblies, including rated corridor walls, exit passageways, and other fire barriers and rated construction (e.g., those elements governed by Chapter 6). As long as the penetrations are fire-stopped and/or installed and tested as required by Section 714.3.1, the level of safety due to the penetration of an interior exit stairway should be equivalent to that of an exit passageway or corridor that was penetrated by structure.

Submittal Information

Date Submitted: August 3, 2012

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR TASO (Technical Assistance and Services Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: taso@dhcd.virginia.gov
Fax Number: (804) 371-7092
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VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: Zack Adams

Representing: Virginia Tech

Mailing Address: 459 Tech Center Drive; Blacksburg, VA 24061

Email Address: adamysz@vt.edu

Telephone Number: 540.231.5985

Proposal Information

Code(s) and Section(s): 404.3.2

Proposed Change (including all relevant section numbers, if multiple sections):

Delete 404.3.2 4.8 as follows:

404.3.2 Fire safety plans. Fire safety plans shall include the following:

4. Floor plans identifying the locations of the following:

~~4.8. Portable fire extinguishers.~~

Supporting Statement (including intent, need, and impact of the proposal):

Portable fire extinguishers are required to be conspicuous (906.5) and unobstructed/unobscured or otherwise marked (906.6) where installed. It provides no tangible benefit to put fire extinguisher locations on a floor plan, since these plans would most likely *not* be used as a reference when responding to a fire emergency. It also adds an additional level of complexity to these drawings which makes them less useful and harder to interpret. Finally, where fire extinguishers are provided for employee use, those employees must be trained per OSHA and such training would include instruction on the location of those extinguishers (see http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9811).

Submittal Information

Date Submitted: October 9, 2012

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

DHCD DBFR SBCO (State Building Codes Office)
600 East Main Street
Suite 300
Richmond, VA 23219

Email Address: Vernon.hodge@dhcd.virginia.gov
Fax Number: (804) 371-7092
Phone Numbers: (804) 371-7150

