VIRGINIA REGISTER OF REGULATIONS

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THE VIRGINIA REGISTER INFORMATION PAGE

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

ADOPTION, AMENDMENT, AND REPEAL OF REGULATIONS

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

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

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

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

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

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

A regulation becomes effective at the conclusion of the 30-day final adoption period, or at any other later date specified by the promulgating agency, unless (i) a legislative objection has been filed, in which event the regulation, unless withdrawn, becomes effective on the date specified, which shall be after the expiration of the 21-day objection period; (ii) the Governor exercises his authority to require the agency to provide for additional public comment, in which event the regulation, unless withdrawn, becomes effective on the date specified, which shall be after the expiration of the period for which the Governor has provided for additional public comment; (iii) the Governor and the General Assembly exercise their authority to suspend the effective date of a regulation until the end of the next regular legislative session; or (iv) the agency suspends the regulatory process, in which event the regulation, unless withdrawn, becomes effective on the date specified, which shall be after the expiration of the 30-day public comment period and no earlier than 15 days from publication of the readopted action.

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

FAST-TRACK RULEMAKING PROCESS

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

EMERGENCY REGULATIONS

Pursuant to § 2.2-4011 of the Code of Virginia, an agency, upon consultation with the Attorney General, and at the discretion of the Governor, may adopt emergency regulations that are necessitated by an emergency situation. An agency may also adopt an emergency regulation when Virginia statutory law or the appropriation act or federal law or federal regulation requires that a regulation be effective in 280 days or less from its enactment. The emergency regulation becomes operative upon its adoption and filing with the Registrar of Regulations, unless a later date is specified. Emergency regulations are limited to no more than 12 months in duration; however, may be extended for six months under certain circumstances as provided for in § 2.2-4011 D. Emergency regulations are published as soon as possible in the *Register*.

During the time the emergency status is in effect, the agency may proceed with the adoption of permanent regulations through the usual procedures. To begin promulgating the replacement regulation, the agency must (i) file the Notice of Intended Regulatory Action with the Registrar within 60 days of the effective date of the emergency regulation and (ii) file the proposed regulation with the Registrar within 180 days of the effective date of the emergency regulation. If the agency chooses not to adopt the regulations, the emergency status ends when the prescribed time limit expires.

STATEMENT

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

CITATION TO THE *VIRGINIA REGISTER*

The *Virginia Register* is cited by volume, issue, page number, and date. **28:2 VA.R. 47-141 September 26, 2011,** refers to Volume 28, Issue 2, pages 47 through 141 of the *Virginia Register* issued on September 26, 2011.

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

PUBLICATION SCHEDULE AND DEADLINES

This schedule is available on the *Register*'s Internet home page (http://register.dls.virginia.gov).

November 2011 through November 2012

Volume: Issue	Material Submitted By Noon*	Will Be Published On
28:5	October 19, 2011	November 7, 2011
28:6	November 2, 2011	November 21, 2011
28:7	November 15, 2011 **(Tuesday)**	December 5, 2011
28:8	November 30, 2011	December 19, 2011
28:9	December 13, 2011 **(Tuesday)**	January 2, 2012
28:10	December 27, 2011 **(Tuesday)**	January 16, 2012
28:11	January 11, 2012	January 30, 2012
28:12	January 25, 2012	February 13, 2012
28:13	February 8, 2012	February 27, 2012
28:14	February 22, 2012	March 12, 2012
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29:2	September 5, 2012	September 24, 2012
29:3	September 19, 2012	October 8, 2012
29:4	October 3, 2012	October 22, 2012
29:5	October 17, 2012	November 5, 2012
29:6	October 31, 2012	November 19, 2012

*Filing deadlines are Wednesdays unless otherwise specified.

PETITIONS FOR RULEMAKING

TITLE 6. CRIMINAL JUSTICE AND CORRECTIONS

BOARD OF JUVENILE JUSTICE

Agency Decision

Title of Regulation: **6VAC35-140. Standards for Juvenile Residential Facilities.**

Statutory Authority: §§ 16.1-309.9, 66-10, and 66-25.1 of the Code of Virginia.

Name of Petitioner: Kate Duvall.

Nature of Petitioner's Request: The petitioner requests the Board of Juvenile Justice to amend its regulation regarding resident classification plans (6VAC35-140-440) in secure residential facilities to provide for a process that implements the policies of the board and is consistent with the goals of the juvenile justice system. The amended regulation should create a classification plan that has due process safeguards, provides for a meaningful ability for a resident's classification level to be lowered, takes into account and gives appropriate weight to factors other than the committing offense(s), and is derived from evidence-based and outcome driven research.

A copy of the full petition is available from Janet P. Van Cuyk, Virginia Department of Juvenile Justice, P.O. Box 1110, Richmond, VA 23218-1110, FAX (804) 371-0773, or email janet.vancuyk@djj.virginia.gov.

Agency Decision: Request denied.

Statement of Reason for Decision: On September 27, 2011, the Board of Juvenile Justice (board) voted to take no action on the petition for rulemaking. In deciding to deny the petition, the board stated that it did not want to initiate the rulemaking process for a change to 6VAC35-140-440 when there are three pending regulatory actions involving that regulatory chapter (proposed 6VAC35-41, 6VAC35-71, and 6VAC35-101). Since these proposed chapters are currently going through the regulatory process, the board expressed a desire to not create confusion by amending the existing regulation when those actions are not final.

Agency Contact: Janet Van Cuyk, Regulatory Coordinator, Department of Juvenile Justice, 700 Centre, 700 East Franklin Street, 4th Floor, Richmond, VA 23219, telephone (804) 371-4097, FAX (804) 371-0773, or email janet.vancuyk@djj.virginia.gov.

VA.R. Doc. No. R11-49; Filed October 10, 2011, 3:09 p.m.

TITLE 18. PROFESSIONAL AND OCCUPATIONAL LICENSING

BOARD OF NURSING

Initial Agency Notice

Title of Regulation: **18VAC90-30. Regulations Governing the Licensure of Nurse Practitioners.**

Statutory Authority: § 54.1-2400 of the Code of Virginia.

Name of Petitioner: Cathy Harrison, on behalf of the Virginia Association of Nurse Anesthetists.

Nature of Petitioner's Request: To review 18VAC90-30, Regulations Governing the Licensure of Nurse Practitioners, to eliminate inconsistencies and, to the extent possible within statutory provisions, ensure uniformity with current practice standards for nurse anesthetists.

Agency's Plan for Disposition of Request: In accordance with Virginia law, the petition was filed with the Register of Regulations for publication on November 7, 2011. Comment is requested until November 30, 2011. Following receipt of all comments on the petition to amend regulations, the petition request will be considered by the Board of Medicine at its meeting on December 2, 2011, and by the Board of Nursing at its meeting on January 24, 2012, to decide whether to make any changes to the regulatory language.

Public Comment Deadline: November 30, 2011.

Agency Contact: Elaine J. Yeatts, Agency Regulatory Coordinator, Department of Health Professions, 9960 Mayland Drive, Suite 300, Richmond, VA 23233, telephone (804) 367-4688, or email elaine.yeatts@dhp.virginia.gov.

VA.R. Doc. No. R12-10; Filed October 13, 2011. 9:50 a.m.

TITLE 4. CONSERVATION AND NATURAL RESOURCES

MARINE RESOURCES COMMISSION

Final Regulation

REGISTRAR'S NOTICE: The following regulations filed by the Marine Resources Commission are exempt from the Administrative Process Act in accordance with § 2.2-4006 A 11 of the Code of Virginia; however, the commission is required to publish the full text of final regulations.

Title of Regulation: **4VAC20-620. Pertaining to Summer Flounder (amending 4VAC20-620-20, 4VAC20-620-30, 4VAC20-620-40).**

Statutory Authority: § 28.2-201 of the Code of Virginia.

Effective Date: November 1, 2011.

Agency Contact: Jane Warren, Agency Regulatory Coordinator, Marine Resources Commission, 2600 Washington Avenue, 3rd Floor, Newport News, VA 23607, telephone (757) 247-2248, FAX (757) 247-2002, or email betty.warren@mrc.virginia.gov.

Summary:

The amendments (i) open the fall directed fishery the second Monday in November, (ii) allow vessels to land up to 10,000 pounds of Summer Flounder for commercial purposes every 15 days, and (iii) redefine "Chesapeake Bay and its tributaries" as all tidal waters of Virginia, excluding the Potomac River tributaries and the coastal area as defined in 4VAC20-620-20.

4VAC20-620-20. Definitions.

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

"Chesapeake Bay and its tributaries" means all tidal waters of Virginia, ~~including~~ excluding the Potomac River tributaries ~~but excluding~~ and the coastal area as defined in this section.

"Coastal area" means the area that includes Virginia's portion of the Territorial Sea and all of the creeks, bays, inlets, and tributaries on the seaside of Accomack County, Northampton County, including areas east of the causeway from Fisherman Island to the mainland and the City of Virginia Beach, including federal areas and state parks fronting on the Atlantic Ocean and east and south of the point where the shoreward boundary of the Territorial Sea joins the mainland at Cape Henry.

"Land" or "landing" means to (i) enter port with finfish, shellfish, crustaceans, or other marine seafood on board any boat or vessel; (ii) begin offloading finfish, shellfish, crustaceans, or other marine seafood; or (iii) offload finfish, shellfish, crustaceans, or other marine seafood.

"Potomac River tributaries" means all the tributaries of the Potomac River that are within Virginia's jurisdiction beginning with, and including, Flag Pond, thence upstream to the District of Columbia boundary.

"Safe harbor" means that a vessel has been authorized by the commissioner to enter Virginia waters from federal waters solely to either dock temporarily at a Virginia seafood buyer's place of business or traverse the Intracoastal Waterway from Virginia to North Carolina.

4VAC20-620-30. Commercial harvest quota and allowable landings.

A. During each calendar year, allowable commercial landings of Summer Flounder shall be limited to a quota in total pounds calculated pursuant to the joint Mid-Atlantic Fishery Management Council/Atlantic States Marine Fisheries Commission Summer Flounder Fishery Management Plan, as approved by the National Marine Fisheries Service on August 6, 1992 (50 CFR Part 625); and shall be distributed as described in subsections B through G of this section.

B. The commercial harvest of Summer Flounder from Virginia tidal waters for each calendar year shall be limited to 300,000 pounds of the annual quota described in subsection A of this section. Of this amount, 142,114 pounds shall be set aside for Chesapeake Bay-wide harvest.

C. From the first Monday in January through the day preceding the ~~last~~ second Monday in November allowable landings of Summer Flounder harvested outside of Virginia shall be limited to an amount of pounds equal to 70.7% of the quota described in subsection A of this section after deducting the amount specified in subsection B of this section.

D. From the ~~last~~ second Monday in November through December 31, allowable landings of Summer Flounder harvested outside of Virginia shall be limited to an amount of pounds equal to 29.3% of the quota, as described in subsection A of this section, after deducting the amount

specified in subsection B of this section, and as may be further modified by subsection E.

E. Should landings from the first Monday in January through the day preceding the ~~last~~ second Monday in November exceed or fall short of 70.7% of the quota described in subsection A of this section, any such excess shall be deducted from allowable landings described in subsection D of this section, and any such shortage shall be added to the allowable landings as described in subsection D of this section. Should the commercial harvest specified in subsection B of this section be projected as less than 300,000 pounds, any such shortage shall be added to the allowable landings described in subsection D of this section.

F. The Marine Resources Commission will give timely notice to the industry of the calculated poundages and any adjustments to any allowable landings described in subsections C and D of this section. It shall be unlawful for any person to harvest or to land Summer Flounder for commercial purposes after the commercial harvest or any allowable landings as described in this section have been attained and announced as such. If any person lands Summer Flounder after the commercial harvest or any allowable landing have been attained and announced as such, the entire amount of Summer Flounder in that person's possession shall be confiscated.

G. It shall be unlawful for any buyer of seafood to receive any Summer Flounder after any commercial harvest or landing quota as described in this section has been attained and announced as such.

4VAC20-620-40. Commercial vessel possession and landing limitations.

A. It shall be unlawful for any person harvesting Summer Flounder outside of Virginia's waters to do any of the following, except as described in subsections B, C, and D of this section:

1. Possess aboard any vessel in Virginia waters any amount of Summer Flounder in excess of 10% by weight of Atlantic croaker or the combined landings, on board a vessel, of black sea bass, scup, squid, scallops and Atlantic mackerel.

2. Possess aboard any vessel in Virginia waters any amount of Summer Flounder in excess of 1,500 pounds landed in combination with Atlantic croaker.

3. Fail to sell the vessel's entire harvest of all species at the point of landing.

B. From the first Monday in March through the day preceding the ~~last~~ second Monday in November, or until it has been projected and announced that 85% of the allowable landings have been taken, it shall be unlawful for any person harvesting Summer Flounder outside of Virginia waters to do any of the following:

1. Possess aboard any vessel in Virginia waters any amount of Summer Flounder in excess of 20,000 pounds.

2. Land Summer Flounder in Virginia for commercial purposes more than twice during each consecutive 15-day period, with the first 15-day period beginning on the first Monday in March.

3. Land in Virginia more than 10,000 pounds of Summer Flounder during each consecutive 15-day period, with the first 15-day period beginning on the first Monday in March.

4. Land in Virginia any amount of Summer Flounder more than once in any consecutive five-day period.

C. From the ~~last~~ second Monday in November through December 31 of each year, or until it has been projected and announced that 85% of the allowable landings have been taken, it shall be unlawful for any person harvesting Summer Flounder outside of Virginia waters to do any of the following:

1. Possess aboard any vessel in Virginia waters any amount of Summer Flounder in excess of ~~15,000~~ 20,000 pounds.

2. Land Summer Flounder in Virginia for commercial purposes more than twice during each consecutive ~~12-day~~ 15-day period, with the first ~~12-day~~ 15-day period beginning on the ~~last~~ second Monday in November.

3. Land in Virginia more than a total of ~~7,500~~ 10,000 pounds of Summer Flounder during each consecutive ~~12-day~~ 15-day period, with the first ~~12-day~~ 15-day period beginning on the ~~last~~ second Monday in November.

4. Land in Virginia any amount of Summer Flounder more than once in any consecutive five-day period.

D. From January 1 through December 31 of each year, any boat or vessel issued a valid federal Summer Flounder moratorium permit and owned and operated by a legal Virginia Commercial Hook-and-Line Licensee that possesses a Restricted Summer Flounder Endorsement shall be restricted to a possession and landing limit of 200 pounds of Summer Flounder, except as described in 4VAC20-620-30 F.

E. Upon request by a marine police officer, the seafood buyer or processor shall offload and accurately determine the total weight of all Summer Flounder aboard any vessel landing Summer Flounder in Virginia.

F. Any possession limit described in this section shall be determined by the weight in pounds of Summer Flounder as customarily packed, boxed and weighed by the seafood buyer or processor. The weight of any Summer Flounder in pounds found in excess of any possession limit described in this section shall be prima facie evidence of violation of this chapter. Persons in possession of Summer Flounder aboard any vessel in excess of the possession limit shall be in violation of this chapter unless that vessel has requested and

been granted safe harbor. Any buyer or processor offloading or accepting any quantity of Summer Flounder from any vessel in excess of the possession limit shall be in violation of this chapter, except as described by subsection I of this section. A buyer or processor may accept or buy Summer Flounder from a vessel that has secured safe harbor, provided that vessel has satisfied the requirements described in subsection I of this section.

G. If a person violates the possession limits described in this section, the entire amount of Summer Flounder in that person's possession shall be confiscated. Any confiscated Summer Flounder shall be considered as a removal from the appropriate commercial harvest or landings quota. Upon confiscation, the marine police officer shall inventory the confiscated Summer Flounder and, at a minimum, secure two bids for purchase of the confiscated Summer Flounder from approved and licensed seafood buyers. The confiscated fish will be sold to the highest bidder and all funds derived from such sale shall be deposited for the Commonwealth pending court resolution of the charge of violating the possession limits established by this chapter. All of the collected funds will be returned to the accused upon a finding of innocence or forfeited to the Commonwealth upon a finding of guilty.

H. It shall be unlawful for a licensed seafood buyer or federally permitted seafood buyer to fail to contact the Marine Resources Commission Operation Station prior to a vessel offloading Summer Flounder harvested outside of Virginia. The buyer shall provide to the Marine Resources Commission the name of the vessel, its captain, an estimate of the amount in pounds of Summer Flounder on board that vessel, and the anticipated or approximate offloading time. Once offloading of any vessel is complete and the weight of the landed Summer Flounder has been determined, the buyer shall contact the Marine Resources Commission Operations Station and report the vessel name and corresponding weight of Summer Flounder landed. It shall be unlawful for any person to offload from a boat or vessel for commercial purposes any Summer Flounder during the period of 9 p.m. to 7 a.m.

I. Any boat or vessel that has entered Virginia waters for safe harbor shall only offload Summer Flounder when the state that licenses that vessel requests to transfer quota to Virginia, in the amount that corresponds to that vessel's possession limit, and the commissioner agrees to accept that transfer of quota.

J. After any commercial harvest or landing quota as described in 4VAC20-620-30 has been attained and announced as such, any boat or vessel possessing Summer Flounder on board may enter Virginia waters for safe harbor but shall contact the Marine Resources Commission Operation Center in advance of such entry into Virginia waters.

K. It shall be unlawful for any person harvesting Summer Flounder outside of Virginia waters to possess aboard any vessel, in Virginia, any amount of Summer Flounder, once it has been projected and announced that 100% of the quota described in 4VAC20-620-30 A has been taken.

VA.R. Doc. No. R12-3029; Filed October 27, 2011, 10:59 a.m.

Final Regulation

Title of Regulation: **4VAC20-720. Pertaining to Restrictions on Oyster Harvest (adding 4VAC20-720-85, 4VAC20-720-91).**

Statutory Authority: § 28.2-201 of the Code of Virginia.

Effective Date: November 1, 2011.

Agency Contact: Jane Warren, Agency Regulatory Coordinator, Marine Resources Commission, 2600 Washington Avenue, 3rd Floor, Newport News, VA 23607, telephone (757) 247-2248, FAX (757) 247-2002, or email betty.warren@mrc.virginia.gov.

Summary:

The amendments (i) establish an oyster seed harvest quota of 120,000 bushels of seed for the James River Seed Area, including the Deep Water Shoal State Replenishment Seed Area, for the 2011/2012 harvest season; (ii) establish that 40,000 bushels of the quota may be harvested from October 1, 2011, through December 31, 2011; and (iii) require a seed oyster harvest permit monthly report on forms provided by the Virginia Marine Resources Commission and daily report through the Interactive-Voice-Response (IVR) system.

4VAC20-720-85. James River seed quota and monitoring.

A. An oyster seed harvest quota of 120,000 bushels of seed is established for the James River Seed Area, including the Deep Water Shoal State Replenishment Seed Area, for the 2011/2012 harvest season. Once it has been projected and announced that the quota of seed has been attained, it shall be unlawful for any person to harvest seed oysters from these areas.

B. Of the 120,000-bushel seed quota described in subsection A of this section no more than 40,000 bushels of this quota may be harvested from October 1, 2011, through December 31, 2011. However, if it is projected and announced that 40,000 bushels of seed have been harvested before December 31, 2011, it shall be unlawful for any person to harvest seed oysters from that date forward until January 1, 2012.

C. Any person harvesting or landing oyster seed from the James River Seed Area, including the Deep Water Shoal State Replenishment Seed Area, shall report monthly on forms provided by the Virginia Marine Resources Commission all harvest of seed oysters. Reporting requirements shall consist of that person's Commercial Fisherman Registration License number, daily number of bushels of seed oysters harvested, harvest rock location, planting location (any lease numbers), and buyer name.

D. It shall be unlawful for any person harvesting seed oysters from the James River Seed Area, including the Deep Water Shoal State Replenishment Seed Area, to fail to contact the Virginia Marine Resources Commission Interactive-Voice-Response (IVR) System within 24 hours of harvest or landing and provide that person's name, Commercial Fisherman Registration License number, time, date, daily number of bushels of seed oysters harvested, harvest rock location, planting location (any lease numbers), and buyer name.

4VAC20-720-91. Harvest permit shall be required for the James River Seed Area, including the Deep Water Shoal State Replenishment Area.

A harvest permit shall be required for the James River Seed Area, including the Deep Water Shoal State Replenishment Seed Area, for the harvesting of seed oysters. It shall be unlawful for any person to harvest or attempt to harvest seed oysters from the James River Seed Area, including the Deep Water Shoal State Replenishment Seed Area, without first obtaining and having on board a harvest permit.

NOTICE: The following form used in administering the regulation was filed by the agency. The form is not being published; however, online users of this issue of the Virginia Register of Regulations may click on the name to access a form. The form is also available from the agency contact or may be viewed at the Office of the Registrar of Regulations, General Assembly Building, 2nd Floor, Richmond, Virginia 23219.

FORMS (4VAC20-720)

Daily Harvest Information For James River Seed Area, Including The Deep Water Shoal State Replenishment Seed Area (eff. 11/11).

VA.R. Doc. No. R12-3031; Filed October 27, 2011, 11:12 a.m.

Final Regulation

Title of Regulation: **4VAC20-910. Pertaining to Scup (Porgy) (amending 4VAC20-910-45).**

Statutory Authority: § 28.2-201 of the Code of Virginia.

Effective Date: November 1, 2011.

Agency Contact: Jane Warren, Agency Regulatory Coordinator, Marine Resources Commission, 2600 Washington Avenue, 3rd Floor, Newport News, VA 23607, telephone (757) 247-2248, FAX (757) 247-2002, or email betty.warren@mrc.virginia.gov.

Summary:

The amendments (i) increase the November 1 through December 31, 2011, commercial scup landing limit quota from 2,000 pounds to 8,000 pounds per trip, (ii) adjust the Winter I landing period from 14 days to 7 days, and (iii) increase the Virginia summer period commercial scup quota from 6,861 pounds to 13,085 pounds.

4VAC20-910-45. Possession limits and harvest quotas.

A. During the period January 1 through April 30 of each year, it shall be unlawful for any person to do any of the following:

1. Possess aboard any vessel in Virginia more than 30,000 pounds of scup.

2. Land in Virginia more than a total of 30,000 pounds of scup during each consecutive ~~14-day~~ 7-day landing period, with the first ~~14-day~~ 7-day period beginning on January ~~2~~ 1.

B. When it is projected and announced that 80% of the coastwide quota for this period has been attained, it shall be unlawful for any person to possess aboard any vessel or to land in Virginia more than a total of 1,000 pounds of scup.

C. During the period November 1 through December 31 of each year, it shall be unlawful for any person to possess aboard any vessel or to land in Virginia more than ~~2,000~~ 8,000 pounds of scup.

D. During the period May 1 through October 31 of each year, the commercial harvest and landing of scup in Virginia shall be limited to ~~6,861~~ 13,085 pounds.

E. For each of the time periods set forth in this section, the Marine Resources Commission will give timely notice to the industry of calculated poundage possession limits and quotas and any adjustments thereto. It shall be unlawful for any person to possess or to land any scup for commercial purposes after any winter period coastwide quota or summer period Virginia quota has been attained and announced as such.

F. It shall be unlawful for any buyer of seafood to receive any scup after any commercial harvest or landing quota has been attained and announced as such.

G. It shall be unlawful for any person fishing with hook and line, rod and reel, spear, gig, or other recreational gear to possess more than 50 scup. When fishing is from a boat or vessel where the entire catch is held in a common hold or container, the possession limit shall be for the boat or vessel and shall be equal to the number of persons on board legally eligible to fish multiplied by 50. The captain or operator of the boat or vessel shall be responsible for any boat or vessel possession limit. Any scup taken after the possession limit has been reached shall be returned to the water immediately.

VA.R. Doc. No. R12-3030; Filed October 27, 2011, 11:05 a.m.

VIRGINIA SOIL AND WATER CONSERVATION BOARD

Fast-Track Regulation

Title of Regulation: **4VAC50-20. Impounding Structure Regulations (amending 4VAC50-20-125).**

Statutory Authority: § 10.1-604 of the Code of Virginia.

Public Hearing Information: No public hearings are scheduled.

Public Comment Deadline: December 7, 2011.

Effective Date: December 22, 2011.

Agency Contact: David C. Dowling, Policy, Planning, and Budget Director, Department of Conservation and Recreation, 203 Governor Street, Suite 302, Richmond, VA 23219, telephone (804) 786-2291, FAX (804) 786-6141, or email david.dowling@dcr.virginia.gov.

Basis: The Virginia Dam Safety Act (§§ 10.1-604 through 10.1-613 of the Code of Virginia) ensures public safety through the proper and safe design, construction, operation, and maintenance of impounding structures in the Commonwealth. This is accomplished through the effective administration of the Virginia Dam Safety Program. Authority for the program rests with the Virginia Soil and Water Conservation Board and it is administered on behalf of the board by the Department of Conservation and Recreations, Division of Dam Safety and Floodplain Management. The program focuses on enhancing public safety through bringing all impounding structures of regulated size under Regular Operation and Maintenance Certificates. Pursuant to § 10.1-605 of the Code of Virginia, the board is directed to promulgate regulations for impounding structures.

Purpose: This amendment to 4VAC50-20-125 is necessary to allow additional time for compliance for certain dam owners who were issued valid Construction or Alteration Permits by the board under the requirements of the regulations as they existed prior to September 26, 2008. These dam owners have invested significant sums of money in pursuit of the conditions of these permits and have proceeded to upgrade their dams in order to achieve compliance with their requirements. Now, due to changes to the regulations effective September 26, 2008, these dams are no longer fully compliant with all regulatory requirements of the Virginia Dam Safety Program despite their full compliance with all permits and conditions issued by the board.

This regulatory change would allow these dam owners to be considered compliant with the regulations for the first full permit cycle following the completion of their upgrades, and would then require them to meet the same standards that are applicable to all other regulated dams following this time. This will provide an extended timeframe for compliance for these owners to have additional necessary work completed to fully meet the current regulations and continue to protect the health, safety, and welfare of citizens of the Commonwealth. In some cases, this may involve a need for dam break inundation zone mapping and other engineering work; in others, additional spillway upgrades may be needed. Requiring all of these conditions to be met immediately would impose a very significant financial burden on these dam owners at a time when they have just completed a very significant investment in their dams.

Rationale for Using Fast-Track Process: This rulemaking is expected to be noncontroversial as it simply provides an extended timeframe for compliance with additional requirements of the regulations that became effective on September 26, 2008. This extended timeframe will apply only to a very select number of dams, believed to be approximately 14 across the Commonwealth. These dams still meet all requirements of the regulations that were effective prior to that time, and will be brought into full compliance with all amendments to the regulations following the completion of one permit cycle. This amendment is intended to prevent an unreasonable burden from being placed upon these dam owners, who have recently completed significant investments in their dams in a good faith effort to comply with the past requirements imposed by the board.

Substance: Existing 4VAC50-20-125 provides an extended timeframe for compliance with spillway design flood requirements of the regulations for dams that were compliant with the requirements of a previous version of the regulations and were under Regular Operation and Maintenance Certificate as of September 26, 2008. The section contains no provision allowing for any extended compliance timeframe for dams that were under construction or alteration permits as of September 26, 2008.

The proposed amended section would include a new subsection E, which would allow dams that were issued construction or alteration permits by the board under the regulations that were effective prior to September 26, 2008, to be considered compliant with the regulations for one permit cycle following their completion of all conditions of these permits and any accompanying Conditional Operation and Maintenance Certificates. This will allow these dam owners additional time to come into compliance with new regulatory requirements.

Issues: The primary advantage of this regulatory action for owners of affected dams is the provision of an extended timeframe for compliance with the amendments made to the regulations in 2008. This will allow for increased flexibility in preparing for upgrades and will avoid a situation where a second upgrade is needed immediately following an upgrade also undertaken pursuant to direction from the board. The primary disadvantage of this regulatory action will be to downstream property owners, roadway users, and residents, in that these dams will not be fully upgraded to meet all

regulatory requirements until following the completion of one six-year permit cycle. However, even in the absence of this regulatory action, it is likely that the affected dams would fall under Conditional Operation and Maintenance Certificates, in which case a compliance schedule would likewise be set and further upgrades would take place over a determined period of time.

Department of Planning and Budget's Economic Impact Analysis:

Summary of the Proposed Amendments to Regulation. The Virginia Soil and Water Conservation Board (Board) proposes to grandfather certain dams from requirements of the Boards Virginia Impounding Structure Regulations (Regulations) that first came into effect in 2008 for one six-year permit cycle. These dams had been issued Construction Permits (permits to build a new dam) or Alteration Permits (permits to make repairs and upgrades to existing dams) under a previous version of the Regulations that was effective prior to September 26, 2008. In some cases, these dams later completed construction fully in compliance with the conditions of their permits, only for it to be found that they may not be fully compliant with all changes made to the Regulations effective September 26, 2008. Under the current regulations, there is no provision for grandfathering these dams or providing an extended timeframe for compliance. The proposed regulation would specify that these dams will be issued Regular Operation and Maintenance Certificates, and thus be found in compliance with the Regulations, for one full six year permit cycle. This is contingent on the owner completing all requirements of the permit and any applicable Conditional Operation and Maintenance Certificate by September 26, 2011. Once the full six year permit cycle is complete, the owner would need to meet the standards applied to other dams throughout the Commonwealth.

Result of Analysis. The benefits likely exceed the costs for all proposed changes.

Estimated Economic Impact. Historically dams in Virginia have largely been kept safe under the Regulations that were in effect prior to September 26, 2008 and under which the dams that would be affected by the Boards proposal received their permits. The Regulations that came into effect in 2008 further increase the assurance of safety.

As the Board and Department of Conservation and Recreation point out, the affected dam owners have invested significant sums of money in pursuit of the conditions of their permits and have proceeded to upgrade their dams in order to achieve compliance with their requirements. Now, due to changes to the regulations effective September 26, 2008, these dams are now no longer fully compliant with all regulatory requirements of the Virginia Dam Safety Program despite their full compliance with all permits and conditions issued by the Board.

The proposed regulatory change (grandfathering) would allow these dam owners to be considered compliant with the Regulations for the first full permit cycle following the completion of their upgrades, and would then require them to meet the same standards that are applicable to all other regulated dams following this time. This will provide an extended timeframe for compliance for these owners to have additional necessary work completed to fully meet the current regulations. In some cases, this may involve a need for dam break inundation zone mapping and other engineering work; in others, additional spillway upgrades may be needed.

Requiring all of these conditions to be met immediately would impose a significant financial burden on these dam owners at a time when they have just completed a very significant investment in their dams. The proposed grandfathering allows the affected owners to delay their next significant expenditure on dam safety, while still maintaining safe dams, and still eventually meeting the more stringent requirements of the 2008 Regulations. The benefit of permitting these affected dam owners who have maintained safe dams some additional time to meet the new requirements likely outweighs the cost of a short period of time of small additional safety risk.

Businesses and Entities Affected. Approximately 14 dams across the Commonwealth would be affected by this amendment. Several of the dam owners may be small businesses. Small businesses that are located downstream of these dams may also be impacted should one of these dams fail.

Localities Particularly Affected. The affected dams are located in the following counties: Albemarle 2, Gloucester 1, Hanover 1, King William 1, Lancaster 1, Louisa 1, New Kent 3, Powhatan 2, and Spotsylvania 2.

Projected Impact on Employment. The proposal amendments are unlikely to significantly affect employment.

Effects on the Use and Value of Private Property. The proposed grandfathering will allow owners of the approximately 14 dams to defer required work for up to six years.

Small Businesses: Costs and Other Effects. The proposed grandfathering will allow small business owners of the affected dams to defer required work for up to six years.

Small Businesses: Alternative Method that Minimizes Adverse Impact. The proposed amendments do not adversely impact small businesses.

Real Estate Development Costs. The proposed grandfathering may delay some development costs, but will not significantly reduce costs in the long run.

Legal Mandate. The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with § 2.2-4007.04 of the

Administrative Process Act and Executive Order Number 14 (10). Section 2.2-4007.04 requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. Further, if the proposed regulation has adverse effect on small businesses, § 2.2-4007.04 requires that such economic impact analyses include (i) an identification and estimate of the number of small businesses subject to the regulation; (ii) the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the regulation, including the type of professional skills necessary for preparing required reports and other documents; (iii) a statement of the probable effect of the regulation on affected small businesses; and (iv) a description of any less intrusive or less costly alternative methods of achieving the purpose of the regulation. The analysis presented above represents DPBs best estimate of these economic impacts.

Agency's Response to Economic Impact Analysis: The Department of Conservation and Recreation concurs with the economic impact analysis prepared by the Department of Planning and Budget regarding the Impounding Structure Regulations (4VAC50-20).

Summary:

The proposed amendments grandfather certain dams from requirements of the regulation that first came into effect in 2008 for one six-year permit cycle. These dams had been issued Construction Permits (permits to build a new dam) or Alteration Permits (permits to make repairs and upgrades to existing dams) under a previous version of the regulations that was effective prior to September 26, 2008. In some cases, these dams later completed construction fully in compliance with the conditions of their permits, only for it to be found that they may not be fully compliant with all changes made to the regulations effective September 26, 2008. Under the current regulations, there is no provision for grandfathering these dams or providing an extended timeframe for compliance. The proposed amendments specify that these dams will be issued Regular Operation and Maintenance Certificates, and thus be found in compliance with the regulations, for one full six-year permit cycle. After this time, they would need to meet the standards applied to other dams throughout the Commonwealth.

4VAC50-20-125. Delayed effective date for Spillway Design Flood requirements for impounding structures.

A. If an impounding structure has been determined to have an adequate spillway capacity prior to September 26, 2008, and is currently operating under a Regular Operation and Maintenance Certificate, but will now require spillway modifications due to changes in these regulations, the owner shall submit to the board an Alteration Permit Application in accordance with 4VAC50-20-80 to address spillway capacity at the time of the expiration of their Regular Operation and Maintenance Certificate or by September 26, 2011, whichever is later. The Alteration Permit Application shall contain a construction sequence with milestones for completing the necessary improvements within five years of Alteration Permit issuance. The board may approve an extension of the prescribed time frame for good cause. Should the owner be able to demonstrate that no spillway capacity change is necessary, the impounding structure may be found to be in compliance with this chapter.

B. In accordance with 4VAC50-20-105, the owner shall submit the Operation and Maintenance Certificate Application (Operation and Maintenance Certificate Application for Virginia Regulated Impounding Structures), the Emergency Action Plan or Emergency Preparedness Plan, and the Inspection Report (Annual Inspection Report for Virginia Regulated Impounding Structures) 90 days prior to the expiration of the Regular Operation and Maintenance Certificate.

C. If circumstances warrant more immediate repairs to the impounding structure, the board may direct alterations to the spillway to be completed sooner.

D. During this delay period, owners are required to address other deficiencies that may exist that are not related to the spillway design flood.

E. Any impounding structure owner who, as of September 26, 2008, held an Alteration Permit or Construction Permit under the requirements of this chapter that were effective prior to that date, who has maintained this permit as valid, and who completes all requirements of such permit and any applicable Conditional Operation and Maintenance Certificate by September 26, 2011, shall not be required to meet new requirements of this chapter that became effective on September 26, 2008, until the completion of the first six-year certificate cycle following completion of all requirements of his permit and any applicable certificates. During this six-year period, the owner may be issued a Regular Operation and Maintenance Certificate should the impounding structure otherwise be eligible for such certificate.

VA.R. Doc. No. R12-2491; Filed October 17, 2011, 2:39 p.m.

TITLE 11. GAMING

STATE LOTTERY BOARD

Fast-Track Regulation

Titles of Regulations: **11VAC5-10. Guidelines for Public Participation in Regulation Development and Promulgation (repealing 11VAC5-10-10 through 11VAC5-10-80).**

11VAC5-11. Public Participation Guidelines (adding 11VAC5-11-10 through 11VAC5-11-110).

Statutory Authority: §§ 2.2-4007.02 and 58.1-4007 of the Code of Virginia.

Public Hearing Information: No public hearings are scheduled.

Public Comment Deadline: December 7, 2011.

Effective Date: December 22, 2011.

Agency Contact: Mitch Belton, Contract and Project Coordinator, State Lottery Department, 900 East Main Street, 9th Floor, Richmond, VA 23219, telephone (804) 692-7136, FAX (804) 692-7325, or email mbelton@valottery.com.

Basis: Under § 2.2-4007.02 of the Code of Virginia, every rulemaking body in Virginia is required to adopt public participation guidelines and to use those guidelines in the development of its regulations. Chapter 321 of the 2008 Acts of Assembly requires agencies to adopt model public participation guidelines issued by the Department of Planning and Budget, or adopt the model guidelines with necessary amendments.

Purpose: The purpose of this regulatory action is to adopt model public participation guidelines as required by the Virginia General Assembly.

Rationale for Using Fast Track Process: Utilization of the fast track regulatory process is warranted due to the fact that (i) the proposed regulation is required by the General Assembly, and (ii) the proposed regulation uses the model public participation guidelines developed by the Department of Planning and Budget as its basis. Accordingly, this action is not expected to be controversial.

Substance: This action creates a new chapter within the existing regulation and uses text verbatim, except applicable agency references and dates, etc., from the applicable text of the model public participation guidelines developed by the Department of Planning and Budget.

Issues: The advantage to the Virginia Lottery Board is that the new public participation guidelines will provide more consistent regulatory participation for affected citizens, stakeholders, and customers. The Lottery Department sees no disadvantages to the public, agency, or Commonwealth in adopting this regulation.

Department of Planning and Budget's Economic Impact Analysis:

Summary of the Proposed Amendments to Regulation. The State Lottery Department (Lottery) proposes to adopt the model public participation guidelines developed by the Department of Planning and Budget in consultation with the Office of the Attorney General (as required by Chapter 321 of the 2008 Acts of Assembly).

Result of Analysis. The benefits likely exceed the costs for all proposed changes.

Estimated Economic Impact. Pursuant to Chapter 321 of the 2008 Acts of Assembly, the Department of Planning and Budget, in consultation with the Office of the Attorney General, (i) developed model public participation guidelines (PPGs) and (ii) provided these model PPGs to each agency that has the authority to promulgate regulations. The purpose of the model PPG legislation is threefold: first, to ensure that each agency or board has a current set of PPGs in place.[1] Second, to ensure that each agency or boards PPGs incorporate the use of technology such as the Virginia Regulatory Town Hall, email to the extent possible, and the use of electronic mailing lists. Last, but perhaps most importantly, to have uniform guidelines in place to facilitate citizen participation in rulemaking and to make those guidelines consistent, to the extent possible, among boards and agencies.

As described above, promulgating the model PPGs will be beneficial in that the Lottery PPGs will: 1) reflect current information, 2) incorporate the use of technology such as the Virginia Regulatory Town Hall, email to the extent possible, and the use of electronic mailing lists, and 3) be largely consistent with other agency PPGs which will facilitate citizen participation in rulemaking.

Businesses and Entities Affected. All businesses, other entities, or individuals interested in participating in the regulatory process as it relates to Lotterys regulations are potentially affected by the agencys public participation guidelines.

Localities Particularly Affected. The proposed regulations do not disproportionately affect particular localities.

Projected Impact on Employment. The proposal amendments do not directly affect employment.

Effects on the Use and Value of Private Property. The proposal amendments do not directly affect the use and value of private property.

Small Businesses: Costs and Other Effects. The proposed amendments do not directly affect small businesses.

Small Businesses: Alternative Method that Minimizes Adverse Impact. The proposed amendments do not adversely affect small businesses.

Real Estate Development Costs. The proposed amendments do not directly affect real estate development costs.

Legal Mandate. The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with § 2.2-4007.04 of the Administrative Process Act and Executive Order Number 14 (10). Section 2.2-4007.04 requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. Further, if the proposed regulation has adverse effect on small businesses, § 2.2-4007.04 requires that such economic impact analyses include (i) an identification and estimate of the number of small businesses subject to the regulation; (ii) the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the regulation, including the type of professional skills necessary for preparing required reports and other documents; (iii) a statement of the probable effect of the regulation on affected small businesses; and (iv) a description of any less intrusive or less costly alternative methods of achieving the purpose of the regulation. The analysis presented above represents DPB's best estimate of these economic impacts.

[1]Some agencies and boards have not updated their PPGs since the mid-late 1980s.

Agency's Response to Economic Impact Analysis: The State Lottery Department concurs with the Department of Planning and Budget's economic impact analysis.

Summary:

The regulations repeal existing regulations on regulation development and public participation and incorporate the model public participation guidelines developed by the Department of Planning and Budget pursuant to Chapter 321 of the 2008 Acts of Assembly. Highlights of the model public participation guidelines include the addition of negotiated rulemaking panels and regulatory advisory panels and instructions for notification.

CHAPTER 11
PUBLIC PARTICIPATION GUIDELINES

Part I
Purpose and Definitions

11VAC5-11-10. Purpose.

The purpose of this chapter is to promote public involvement in the development, amendment, or repeal of the regulations of the State Lottery Department. This chapter does not apply to regulations, guidelines, or other documents exempted or excluded from the provisions of the Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia).

11VAC5-11-20. Definitions.

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

"Administrative Process Act" means Chapter 40 (§ 2.2-4000 et seq.) of Title 2.2 of the Code of Virginia.

"Agency" means the State Lottery Department, which is the unit of state government empowered by the agency's basic law to make regulations or decide cases. Actions specified in this chapter may be fulfilled by state employees as delegated by the agency.

"Basic law" means provisions in the Code of Virginia that delineate the basic authority and responsibilities of an agency.

"Commonwealth Calendar" means the electronic calendar for official government meetings open to the public as required by § 2.2-3707 C of the Freedom of Information Act.

"Negotiated rulemaking panel" or "NRP" means an ad hoc advisory panel of interested parties established by an agency to consider issues that are controversial with the assistance of a facilitator or mediator, for the purpose of reaching a consensus in the development of a proposed regulatory action.

"Notification list" means a list used to notify persons pursuant to this chapter. Such a list may include an electronic list maintained through the Virginia Regulatory Town Hall or other list maintained by the agency.

"Open meeting" means any scheduled gathering of a unit of state government empowered by an agency's basic law to make regulations or decide cases, which is related to promulgating, amending or repealing a regulation.

"Person" means any individual, corporation, partnership, association, cooperative, limited liability company, trust, joint venture, government, political subdivision, or any other legal or commercial entity and any successor, representative, agent, agency, or instrumentality thereof.

"Public hearing" means a scheduled time at which members or staff of the agency will meet for the purpose of receiving public comment on a regulatory action.

"Regulation" means any statement of general application having the force of law, affecting the rights or conduct of any person, adopted by the agency in accordance with the authority conferred on it by applicable laws.

"Regulatory action" means the promulgation, amendment, or repeal of a regulation by the agency.

"Regulatory advisory panel" or "RAP" means a standing or ad hoc advisory panel of interested parties established by the agency for the purpose of assisting in regulatory actions.

"Town Hall" means the Virginia Regulatory Town Hall, the website operated by the Virginia Department of Planning and Budget at www.townhall.virginia.gov, which has online public comment forums and displays information about regulatory meetings and regulatory actions under consideration in Virginia and sends this information to registered public users.

"Virginia Register" means the Virginia Register of Regulations, the publication that provides official legal notice of new, amended, and repealed regulations of state agencies, which is published under the provisions of Article 6 (§ 2.2-4031 et seq.) of the Administrative Process Act.

Part II
Notification of Interested Persons

11VAC5-11-30. Notification list.

A. The agency shall maintain a list of persons who have requested to be notified of regulatory actions being pursued by the agency.

B. Any person may request to be placed on a notification list by registering as a public user on the Town Hall or by making a request to the agency. Any person who requests to be placed on a notification list shall elect to be notified either by electronic means or through a postal carrier.

C. The agency may maintain additional lists for persons who have requested to be informed of specific regulatory issues, proposals, or actions.

D. When electronic mail is returned as undeliverable on multiple occasions at least 24 hours apart, that person may be deleted from the list. A single undeliverable message is insufficient cause to delete the person from the list.

E. When mail delivered by a postal carrier is returned as undeliverable on multiple occasions, that person may be deleted from the list.

F. The agency may periodically request those persons on the notification list to indicate their desire to either continue to be notified electronically, receive documents through a postal carrier, or be deleted from the list.

11VAC5-11-40. Information to be sent to persons on the notification list.

A. To persons electing to receive electronic notification or notification through a postal carrier as described in 11VAC5-11-30, the agency shall send the following information:

1. A notice of intended regulatory action (NOIRA).

2. A notice of the comment period on a proposed, a reproposed, or a fast-track regulation and hyperlinks to, or instructions on how to obtain, a copy of the regulation and any supporting documents.

3. A notice soliciting comment on a final regulation when the regulatory process has been extended pursuant to § 2.2-4007.06 or 2.2-4013 C of the Code of Virginia.

B. The failure of any person to receive any notice or copies of any documents shall not affect the validity of any regulation or regulatory action.

Part III
Public Participation Procedures

11VAC5-11-50. Public comment.

A. In considering any nonemergency, nonexempt regulatory action, the agency shall afford interested persons an opportunity to submit data, views, and arguments, either orally or in writing, to the agency. Such opportunity to comment shall include an online public comment forum on the Town Hall.

1. To any requesting person, the agency shall provide copies of the statement of basis, purpose, substance, and issues; the economic impact analysis of the proposed or fast-track regulatory action; and the agency's response to public comments received.

2. The agency may begin crafting a regulatory action prior to or during any opportunities it provides to the public to submit comments.

B. The agency shall accept public comments in writing after the publication of a regulatory action in the Virginia Register as follows:

1. For a minimum of 30 calendar days following the publication of the notice of intended regulatory action (NOIRA).

2. For a minimum of 60 calendar days following the publication of a proposed regulation.

3. For a minimum of 30 calendar days following the publication of a reproposed regulation.

4. For a minimum of 30 calendar days following the publication of a final adopted regulation.

5. For a minimum of 30 calendar days following the publication of a fast-track regulation.

6. For a minimum of 21 calendar days following the publication of a notice of periodic review.

7. Not later than 21 calendar days following the publication of a petition for rulemaking.

C. The agency may determine if any of the comment periods listed in subsection B of this section shall be extended.

D. If the Governor finds that one or more changes with substantial impact have been made to a proposed regulation,

he may require the agency to provide an additional 30 calendar days to solicit additional public comment on the changes in accordance with § 2.2-4013 C of the Code of Virginia.

E. The agency shall send a draft of the agency's summary description of public comment to all public commenters on the proposed regulation at least five days before final adoption of the regulation pursuant to § 2.2-4012 E of the Code of Virginia.

11VAC5-11-60. Petition for rulemaking.

A. As provided in § 2.2-4007 of the Code of Virginia, any person may petition the agency to consider a regulatory action.

B. A petition shall include but is not limited to the following information:

1. The petitioner's name and contact information;

2. The substance and purpose of the rulemaking that is requested, including reference to any applicable Virginia Administrative Code sections; and

3. Reference to the legal authority of the agency to take the action requested.

C. The agency shall receive, consider and respond to a petition pursuant to § 2.2-4007 and shall have the sole authority to dispose of the petition.

D. The petition shall be posted on the Town Hall and published in the Virginia Register.

E. Nothing in this chapter shall prohibit the agency from receiving information or from proceeding on its own motion for rulemaking.

11VAC5-11-70. Appointment of regulatory advisory panel.

A. The agency may appoint a regulatory advisory panel (RAP) to provide professional specialization or technical assistance when the agency determines that such expertise is necessary to address a specific regulatory issue or action or when individuals indicate an interest in working with the agency on a specific regulatory issue or action.

B. Any person may request the appointment of a RAP and request to participate in its activities. The agency shall determine when a RAP shall be appointed and the composition of the RAP.

C. A RAP may be dissolved by the agency if:

1. The proposed text of the regulation is posted on the Town Hall, published in the Virginia Register, or such other time as the agency determines is appropriate; or

2. The agency determines that the regulatory action is either exempt or excluded from the requirements of the Administrative Process Act.

11VAC5-11-80. Appointment of negotiated rulemaking panel.

A. The agency may appoint a negotiated rulemaking panel (NRP) if a regulatory action is expected to be controversial.

B. An NRP that has been appointed by the agency may be dissolved by the agency when:

1. There is no longer controversy associated with the development of the regulation;

2. The agency determines that the regulatory action is either exempt or excluded from the requirements of the Administrative Process Act; or

3. The agency determines that resolution of a controversy is unlikely.

11VAC5-11-90. Meetings.

Notice of any open meeting, including meetings of a RAP or NRP, shall be posted on the Virginia Regulatory Town Hall and Commonwealth Calendar at least seven working days prior to the date of the meeting. The exception to this requirement is any meeting held in accordance with § 2.2-3707 D of the Code of Virginia allowing for contemporaneous notice to be provided to participants and the public.

11VAC5-11-100. Public hearings on regulations.

A. The agency shall indicate in its notice of intended regulatory action whether it plans to hold a public hearing following the publication of the proposed stage of the regulatory action.

B. The agency may conduct one or more public hearings during the comment period following the publication of a proposed regulatory action.

C. An agency is required to hold a public hearing following the publication of the proposed regulatory action when:

1. The agency's basic law requires the agency to hold a public hearing;

2. The Governor directs the agency to hold a public hearing; or

3. The agency receives requests for a public hearing from at least 25 persons during the public comment period following the publication of the notice of intended regulatory action.

D. Notice of any public hearing shall be posted on the Town Hall and Commonwealth Calendar at least seven working days prior to the date of the hearing. The agency shall also

notify those persons who requested a hearing under subdivision C 3 of this section.

11VAC5-11-110. Periodic review of regulations.

A. The agency shall conduct a periodic review of its regulations consistent with:

1. An executive order issued by the Governor pursuant to § 2.2-4017 of the Administrative Process Act to receive comment on all existing regulations as to their effectiveness, efficiency, necessity, clarity, and cost of compliance; and

2. The requirements in § 2.2-4007.1 of the Administrative Process Act regarding regulatory flexibility for small businesses.

B. A periodic review may be conducted separately or in conjunction with other regulatory actions.

C. Notice of a periodic review shall be posted on the Town Hall and published in the Virginia Register.

VA.R. Doc. No. R12-1447; Filed October 19, 2011, 2:26 p.m.

CHARITABLE GAMING BOARD

Proposed Regulation

Titles of Regulations: **11VAC15-22. Charitable Gaming Rules and Regulations (repealing 11VAC15-22-10 through 11VAC15-22-120).**

11VAC15-31. Supplier Regulations (repealing 11VAC15-31-10 through 11VAC15-31-60).

11VAC15-40. Charitable Gaming Regulations (adding 11VAC15-40-10 through 11VAC15-40-430).

Statutory Authority: § 18.2-340.15 of the Code of Virginia.

Public Hearing Information:

December 13, 2011 - 10:15 a.m. - Oliver Hill Building, 102 Governor Street, 2nd Floor Board Room, Richmond, VA

Public Comment Deadline: January 6, 2012.

Agency Contact: Erin Williams, Policy and Planning Coordinator, Department of Agriculture and Consumer Services, P.O. Box 1163, Richmond, VA 23218, telephone (804) 786-1308, FAX (804) 371-7479, TTY (800) 828-1120, or email erin.williams@vdacs.virginia.gov.

Basis: Section 18.2-340.15 of the Code of Virginia authorizes the Charitable Gaming Board to prescribe regulations and conditions under which charitable gaming is conducted in Virginia to ensure consistency with the purpose for which such gaming is permitted. Additionally, Chapter 264 of the 2007 Acts of Assembly amended the statute by requiring changes to the charitable gaming regulations in order to implement electronic games of chance systems. The Charitable Gaming Board approved the promulgation of a single regulation that will consolidate the two current regulations and provide for the implementation of regulations regarding electronic games of chance systems.

Purpose: The existence of two separate but closely interrelated regulations governing charitable gaming has resulted in duplicative, burdensome, and unnecessarily lengthy efforts in those instances when the agency has had to amend both regulations in response to a single change in the statute, as was the case with the passage of HB 1998 (Chapter 264 of the 2007 Acts of Assembly). The promulgation of a single, consolidated regulation will greatly facilitate the agency's administration of the charitable gaming program.

Proponents of the legislation that resulted in the authorization of electronic games of chance systems in the Commonwealth have indicated that charitable gaming organizations will see significant increases in both attendance and revenues through the offering of electronic pull-tabs at their gaming events. Attendance at charitable gaming events has dropped considerably in the last few years, in some cases by as much as 40%, on account of changing demographics, as well as the economic downturn. The ability to offer electronic pull-tabs is expected to attract younger players to bingo halls across Virginia, to lower the gaming organizations overhead costs through reduced expenses for paper supplies, and to improve the organizations ability to meet the 10% use of proceeds required by the Charitable Gaming Board.

Substance: The proposed regulation consolidates the substance of the current regulation titled Charitable Gaming Rules and Regulations, 11VAC15-22, as well as the substance of the current regulation titled Supplier Regulations, 11VAC15-31. Substantive changes include the addition of provisions regarding full automatic daubing of bingo numbers and progressive bingo games, both of which were authorized by Chapter 429 of the 2010 Acts of Assembly. The proposed regulations reduce the time required between gaming activities from one hour to 30 minutes. The existing regulations pertaining to electronic bingo devices (which are devices that support conventional bingo games and should not be confused with devices that support electronic pull-tabs) were modified to permit the use of electronic bingo device systems that do not identify at the point of sale the number of the electronic bingo device issued to the player.

The section pertaining to electronic games of chance systems includes rules for the conduct of electronic games of chance, requirements for manufacturers and suppliers of electronic games of chance systems, and construction and other standards for electronic games of chance systems.

Issues: The inclusion of provisions pertaining to electronic games of chance systems will provide charitable gaming organizations a new option to promote greater attendance at their gaming events. Greater attendance should increase the

revenue organizations generate from their charitable gaming activities, which, in turn, should facilitate compliance with applicable requirements regarding the charitable use of organizations proceeds.

The promulgation of a single, consolidated regulation will greatly facilitate the agency's administration of the charitable gaming program by eliminating the need for duplicative regulatory actions due to the existence of two interrelated regulations.

Special interest groups are monitoring the progress of this regulation to ensure that it does not lead to casino-style gambling or expand the type of gaming that is allowed in the Commonwealth. The agency has involved these stakeholders during relevant discussions; the agency is not aware of specific concerns with the proposed regulations.

Department of Planning and Budget's Economic Impact Analysis:

Summary of the Proposed Amendments to Regulation. The Virginia Charitable Gaming Board (Board) proposes to consolidate two separate regulations, Charitable Gaming Rules and Regulations, 11VAC15-22, and Supplier Regulations, 11VAC15-31, into one regulation that will also establish rules regarding electronic games of chance systems for charitable gaming.

Result of Analysis. The benefits likely exceed the costs for one or more proposed changes. There is insufficient data to accurately compare the magnitude of the benefits versus the costs for other changes.

Estimated Economic Impact. Chapter 264 of the 2007 Virginia Acts of Assembly authorized the use of electronic games of chance, also known as electronic pull tabs, by charitable gaming organizations. The chapter also specifies that no person shall offer to sell, sell or otherwise provide charitable gaming supplies to any qualified organization and no manufacturer shall distribute electronic games of chance systems for charitable gaming in the Commonwealth unless and until such person has made application for and has been issued a permit by the Department (of Agriculture and Consumer Services). In practice electronic games of chance have not yet been available for charitable gaming since the Board has not yet promulgated regulations that would enable the issuing of a permit for the distribution of electronic games of chance. In the current action the Board proposes rules that would enable the distribution and use of electronic games of chance to go forward.

In calendar year 2009, the most recent year data is available, there were $279 million in gross receipts for charitable gaming in Virginia.[1] Based on the experiences of other states which introduced electronic pull tabs, the Virginia Department of Agriculture and Consumer Services (Department) expects gross receipts from charitable gaming to at least triple with the advent of electronic pull tabs. Manufacturers and suppliers of electronic games of chance will certainly benefit with increased business. Purchasing and using electronic games of chance for fundraising is of course optional for charitable organizations; so the charitable organizations will only purchase and use them if they believe they will provide a net benefit through increased revenue available for their charitable purposes. A significant portion of Virginians believe that there is a negative impact on morality associated with gambling. The introduction and use of electronic pull tabs will very likely increase at least the dollar value of gambling in Virginia. It is beyond the scope of this analysis to compare the benefits of increased business for manufacturers and suppliers of electronic games of chance and the benefits of increased revenue for charitable organizations to use for their charitable purposes to the potential negative moral impact of increased gambling. That is intrinsically a subjective value judgment.

The Board proposes several other changes that will have some impact. The fee for a permit change would be eliminated. This is obviously beneficial for permit holders. The Board believes funds for operation are sufficient without charging this fee. The Department would use compliance agreements rather than consent orders and remedial business plans rather than corrective action plans. This would be less heavy handed and would likely create a more cooperative relationship between the Department and charitable organizations. The required break between charitable gaming activities would be reduced from one hour to 30 minutes. This would enable more time to be devoted to fundraising while still allotting sufficient transition time between charitable organizations. All of these changes provide benefit without significant cost.

Specific dollar amounts included in the current regulations that are prescribed by the Code of Virginia would be replaced by references to sections of the Code that prescribe these amounts. This is beneficial since when and if these dollar amounts are changed in the Code the dollar amounts currently listed in the regulations would then be in conflict with the Code. When the Code and regulations conflict, the Code prevails. Thus, persons who read the regulations would be misled under these circumstances. Amending regulations can take a significant amount of time. Thus, replacing specified dollar amounts included in the current regulations that are prescribed by the Code with references to sections of the Code that prescribe these amounts would enable the regulations to always be accurate concerning the effective legal dollar figures. Thus this proposed change clearly provides a net benefit.

The current regulations state that volunteer game workers may not play bingo at any session they have worked or purchase instant bingo, pull-tab, or seal card products from organizations they assist on the day they have volunteered or from any deal they have helped sell, whichever is later. Under the proposed regulations, no one involved in the conduct of

bingo may play bingo at any session they have worked or intend to work. No one involved in the sale or redemption of any instant bingo, pull-tabs, seal cards, or electronic game cards may purchase directly or through others instant bingo, pull-tab, seal card, or electronic game card products from organizations they assist on the day they have worked or from any deal they have helped sell or redeem, whichever occurs later. Thus paid workers as well as volunteers are prohibited from gambling in games in which they work on the days they work as well as deals they have helped sell or redeem. Paid workers and volunteers could still gamble on other days provided that the games are not deals they have helped sell or redeem. This proposed change does introduce a new limitation on paid workers, but it seems a reasonable change to help ensure fairness while still permitting paid workers the opportunity to participate in games in which they are not directly involved.

Businesses and Entities Affected. The proposed regulations will potentially affect the approximate 400 qualified charitable gaming organizations and 19 charitable gaming suppliers in the Commonwealth as well as manufacturers of electronic games of chance systems. The Virginia Department of Agriculture and Consumer Services estimates that the majority of the charitable gaming suppliers are small businesses.

Localities Particularly Affected. The proposed amendments do not disproportionately affect particular localities.

Projected Impact on Employment. The proposal to establish rules for electronic games of chance systems will enable the distribution and use of electronic games of chance to go forward. This will likely significantly increase business for manufacturers and suppliers of electronic games of chance. Employment at some of these firms will likely moderately increase.

Effects on the Use and Value of Private Property. The proposal to establish rules for electronic games of chance systems will enable the distribution and use of electronic games of chance to go forward. This will likely significantly increase business for manufacturers and suppliers of electronic games of chance. The net value of these firms will likely increase.

Small Businesses: Costs and Other Effects. The proposed amendments are unlikely to increase costs for small businesses.

Small Businesses: Alternative Method that Minimizes Adverse Impact. The proposed amendments are unlikely to significantly adversely affect small businesses.

Real Estate Development Costs. The proposed amendments are unlikely to significantly affect real estate development costs.

Legal Mandate. The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with § 2.2-4007.04 of the Administrative Process Act and Executive Order Number 14 (10). Section 2.2-4007.04 requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. Further, if the proposed regulation has adverse effect on small businesses, § 2.2-4007.04 requires that such economic impact analyses include (i) an identification and estimate of the number of small businesses subject to the regulation; (ii) the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the regulation, including the type of professional skills necessary for preparing required reports and other documents; (iii) a statement of the probable effect of the regulation on affected small businesses; and (iv) a description of any less intrusive or less costly alternative methods of achieving the purpose of the regulation. The analysis presented above represents DPB's best estimate of these economic impacts.

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[1]Data source: Virginia Department of Agriculture and Consumer Services

Agency's Response to Economic Impact Analysis: The Department of Agriculture and Consumer Services concurs with the analysis of the Department of Planning and Budget.

Summary:

The proposed regulation consists of five parts pertaining to (i) definitions, (ii) charitable gaming organizations and the conduct of charitable gaming, (iii) charitable gaming suppliers, (iv) electronic games of chance systems, and (v) administrative process.

The section pertaining to charitable gaming organizations and the conduct of charitable gaming reflects the substance of the current regulation titled Charitable Gaming Rules and Regulations, 11VAC15-22. The section pertaining to charitable gaming suppliers reflects the substance of the current regulation titled Supplier Regulations, 11VAC15-31. The section pertaining to electronic games of chance systems includes rules for the conduct of electronic games of chance, requirements for manufacturers and suppliers of electronic games of chance systems, and construction and other standards for electronic games of chance systems. The sections pertaining to definitions and the administrative process consolidate the definitions and administrative process sections found in the current regulations, 11VAC15-22 and 11VAC15-31.

CHAPTER 40
CHARITABLE GAMING REGULATIONS

Part 1
Definitions

11VAC15-40-10. Definitions.

In addition to the definitions contained in § 18.2-340.16 of the Code of Virginia, the words and terms below when used in this regulation shall have the following meanings unless the context clearly indicates otherwise:

"Agent" means any person authorized by a supplier to act for or in place of such supplier.

"Board" means the Virginia Charitable Gaming Board.

"Board of directors" means the board of directors, managing committee, or other supervisory body of a qualified organization.

"Calendar day" means the period of 24 consecutive hours commencing at 12:01 a.m. and concluding at midnight.

"Calendar week" means the period of seven consecutive calendar days commencing at 12:01 a.m. on Sunday and ending at midnight the following Saturday.

"Cash" means United States currency or coinage.

"Commissioner" means the Commissioner of the Virginia Department of Agriculture and Consumer Services.

"Concealed face bingo card" means a nonreusable bingo card constructed to conceal the card face.

"Conduct" means the actions associated with the provision of a gaming operation during and immediately before or after the permitted activity, which may include, but not be limited to (i) selling bingo cards or packs, electronic devices, instant bingo or pull-tab cards, or raffle tickets; (ii) calling bingo games; (iii) distributing prizes; and (iv) any other services provided by volunteer workers.

"Control program" means software involved in any critical game function.

"Daubing" means covering a square containing a number called with indelible ink or otherwise marking a number called on a card or an electronic facsimile of a card.

"Deal" means each separate package or series of packages consisting of one game of instant bingo, pull-tabs, or seal cards with the same serial number.

"Decision bingo" means a bingo game where the cost to a player to play is dependent on the number of bingo numbers called and the prize payout is in direct relationship to the number of participants and the number of bingo numbers called, but shall not exceed statutory prize limits for a regular bingo game.

"Department" means the Virginia Department of Agriculture and Consumer Services, Division of Consumer Protection, Office of Charitable Gaming.

"Designator" means an object used in the number selection process, such as a ping-pong ball, upon which bingo letters and numbers are imprinted.

"Discount" means any reduction in cost of admission or game packs or any other purchases through use of coupons, free packs, or other similar methods.

"Disinterested player" means a player who is unbiased.

"Disposable paper card" means a nonreusable, paper bingo card manufactured with preprinted numbers.

"Distributed pull-tab system" means a computer system consisting of a computer or computers and associated equipment for the use of distributing a finite number of electronic instant bingo and/or pull-tab outcomes (i.e., electronic game cards), a certain number of which entitle a player to prize awards at various levels.

"Door prize" means any prize awarded by the random drawing or random selection of a name or number based solely on attendance at a gaming session.

"Electronic bingo device" means an electronic device that uses proprietary software or hardware or, in conjunction with commonly available software and computers, displays facsimiles of bingo cards and allows a player to daub such cards or allows for the automatic daubing of such cards.

"Electronic game card" means an electronic version of a single instant bingo card or pull-tab. An electronic game card is a predetermined game outcome in electronic form, distributed on-demand from a finite number of game outcomes by a distributed pull-tab system.

"Equipment and video systems" means equipment that facilitates the conduct of charitable gaming such as ball blowers, flashboards, electronic verifiers, and replacement parts for such equipment.

"Event game" means a bingo game that is played using instant bingo cards or pull-tabs in which the winners include both instant winners and winners who are determined by the random draw of a bingo ball, the random call of a bingo number, or the use of a seal card, and that is sold and played to completion during a single bingo session.

"Fiscal year" or "annual reporting period" means the 12-month period beginning January 1 and ending December 31 of any given year.

"Flare" means a piece of paper, cardboard, or similar material that bears printed information relating to the name of the manufacturer or logo, name of the game, card count, cost per play, serial number, the number of prizes to be awarded,

and the specific prize amounts in a deal of instant bingo, pull-tab, or seal cards.

"Free space number," "perm number," "center number," "card number," or "face number" means the number generally printed in the center space of a bingo card that identifies the unique pattern of numbers printed on that card.

"Game program" means a written list of all games to be played including, but not limited to, the sales price of all bingo paper and electronic bingo devices, pack configuration, prize amounts to be paid during a session for each game, and an indication whether prize amounts are fixed or are based on attendance.

"Game set" means the entire pool of electronic game cards that contains predefined and randomized game results assigned under a unique serial number. This term is equivalent to "deal" or "deck."

"Game subset" means a division of a game set into equal sizes.

"Gaming activity" means one bingo session and the sale and redemption of instant bingo, pull-tabs, seal cards, or electronic game cards done in conjunction with that bingo session and in accordance with the provisions of this chapter.

"Immediate family" means one's spouse, parent, child, sibling, grandchild, grandparent, mother or father-in-law, or stepchild.

"Interested persons" means the president, an officer, or a bingo manager of any qualified organization that is exempt or is a permit applicant or holds a permit to conduct charitable gaming; or the owner, director, officer or partner of an entity engaged in supplying charitable gaming supplies to organizations.

"IRS" means the United States Internal Revenue Service.

"Management" means the provision of oversight of a gaming operation, which may include, but is not limited to, the responsibilities of applying for and maintaining a permit or authorization; compiling, submitting, and maintaining required records and financial reports; and ensuring that all aspects of the operation are in compliance with all applicable statutes and regulations.

"Manufacturer" means a person who or entity that assembles from raw materials or subparts a completed piece of bingo or other charitable gaming equipment or supplies. "Manufacturer" also means a person who or entity that modifies, converts, adds, or removes parts to or from bingo or other charitable gaming equipment or supplies to further their promotion or sale for the conduct of charitable gaming.

"OCG number" means a unique identification number issued by the department.

"Operation" means the activities associated with production of a charitable gaming activity, which may include, but is not limited to, (i) the direct on-site supervision of the conduct of charitable gaming; (ii) coordination of volunteers; and (iii) all responsibilities of charitable gaming designated by the organization's management.

"Owner" means any individual with financial interest of 10% or more in a supplier.

"Pack" means sheets of bingo paper or electronic facsimiles assembled in the order of games to be played. This shall not include any raffle.

"Player device" means an electronic unit that may take the form of an upright cabinet or a handheld device or may be of any other composition as approved by the department used to facilitate the play of electronic instant bingo or pull-tab games.

"Prize" means cash, merchandise, certificate, or other item of value awarded to a winning player.

"Progressive bingo" means a bingo game in which the prize is carried forward to the next game if a predetermined pattern is not completed within a specified number of bingo numbers called.

"Progressive seal card" means a seal card game in which a prize is carried forward to the next deal if not won when a deal is completed.

"Remuneration" means payment in cash or the provision of anything of value for goods provided or services rendered.

"Seal card" means a board or placard used in conjunction with a deal of the same serial number that contains one or more concealed areas that, when removed or opened, reveal a predesignated winning number, letter, or symbol located on that board or placard.

"Selection device" means a manually or mechanically operated device to randomly select bingo numbers.

"Serial number" means a unique number printed by the manufacturer on each bingo card in a set; each instant bingo, pull-tab, or seal card in a deal; each electronic bingo device; or each door prize ticket.

"Series number" means the number of unique card faces contained in a set of disposable bingo paper cards or bingo hard cards. A 9000 series, for example, has 9000 unique faces.

"Session" means a period of time during which one or more bingo games are conducted that begins with the selection of the first ball for the first game and ends with the selection of the last ball for the last game.

"Treasure chest" means a raffle including a locked treasure chest containing a prize that a participant, selected through some other authorized charitable game, is afforded the chance

to select from a series of keys a predetermined key that will open the locked treasure chest to win a prize.

"Use of proceeds" means the use of funds derived by an organization from its charitable gaming activities, which are disbursed for those lawful religious, charitable, community, or educational purposes. This includes expenses relating to the acquisition, construction, maintenance, or repair of any interest in the real property involved in the operation of the organization and used for lawful religious, charitable, community, or educational purposes.

"Voucher" means a printed ticket tendered to the player, upon request, for any unused game plays and/or winnings that remain on the player device.

"WINGO" means a variation of a traditional bingo game that uses visual devices rather than a verbal caller and is intended for play by hearing impaired persons.

Part II
Charitable Gaming Organizations

Article 1
Permits

11VAC15-40-20. Eligibility for permit to conduct charitable gaming; when valid; permit requirements.

A. The conduct of charitable gaming is a privilege that may be granted or denied by the department. Except as provided in § 18.2-340.23 of the Code of Virginia, every eligible organization, volunteer fire department, and rescue squad with anticipated gross gaming receipts that exceed the amount set forth in § 18.2-340.23 of the Code of Virginia in any 12-month period shall obtain a permit from the department prior to the commencement of charitable gaming activities. To be eligible for a permit an organization must meet all of the requirements of § 18.2-340.24 of the Code of Virginia.

B. Pursuant to § 18.2-340.24 B of the Code of Virginia, the department shall review a tax exempt request submitted to the IRS for a tax exempt status determination and may issue an interim certification of tax-exempt status solely for the purpose of charitable gaming, conditioned upon a determination by the IRS. The department shall charge the fee set forth in § 18.2-340.24 B of the Code of Virginia for this review. The fee shall be payable to the Treasurer of Virginia.

C. A permit shall be valid only for activities, locations, days, dates, and times as listed on the permit.

D. In accordance with § 18.2-340.19 A 1 of the Code of Virginia, as a condition of receiving a permit, a minimum of 10% of charitable gaming gross receipts shall be used for (i) those lawful religious, charitable, community, or educational purposes for which the organization is specifically chartered or organized or (ii) those expenses relating to the acquisition, construction, maintenance, or repair of any interest in real property involved in the operation of the organization and used for lawful religious, charitable, community, or educational purposes.

E. If an organization fails to meet the minimum use of proceeds requirement, its permit may be suspended or revoked. However, the department shall not suspend or revoke the permit of any organization solely because of its failure to meet the required percentage without having first provided the organization with an opportunity to implement a corrective action plan.

F. An organization may request a temporary reduction in the predetermined percentage specified in subsection D of this section from the department. In reviewing such a request, the department shall consider such factors appropriate to and consistent with the purpose of charitable gaming, which may include, but not be limited to, (i) the organization's overall financial condition; (ii) the length of time the organization has been involved in charitable gaming; (iii) the extent of the deficiency; and (iv) the progress that the organization has made in attaining the minimum percentage in accordance with a corrective action plan pursuant to subsection E of this section.

G. An organization whose permit is revoked for failure to comply with provisions set forth in subsection D of this section shall be eligible to reapply for a permit at the end of one year from the date of revocation. The department, at its discretion, may issue the permit if it is satisfied that the organization has made substantial efforts towards meeting its corrective action plan.

11VAC15-40-30. Permit application process.

A. Any organization anticipating gross gaming receipts that exceed the amount set forth in § 18.2-340.23 of the Code of Virginia shall complete a department-prescribed application to request issuance or renewal of an annual permit to conduct charitable gaming. Organizations shall submit a nonrefundable fee payable to the Treasurer of Virginia in the amount of $200 with the application, unless the organization is exempt from such fee pursuant to § 18.2-340.23 of the Code of Virginia.

B. The department may initiate action against any organization exempt from permit requirements when it reasonably believes the organization is not in compliance with the provisions of charitable gaming laws or applicable regulations, or both, of the board.

C. Permit holders requiring a special permit pursuant to § 18.2-340.27 E of the Code of Virginia shall convey their request on a form prescribed by the department. Organizations shall submit a fee payable to the Treasurer of Virginia in the amount of $50 with the request for a special permit, unless the organization is exempt from such fee pursuant to § 18.2-340.23 of the Code of Virginia.

D. Permits shall be valid for a period of one year from the date of issuance or for a period specified on the permit. The department may issue permits for periods of less than one year.

E. Permits shall be granted only after a background investigation of an organization or interested persons, or both, to ensure public safety and welfare as required by § 18.2-340.25 of the Code of Virginia. Investigations shall consider the nature, the age and severity, and the potential harm to public safety and welfare of any criminal offenses. The investigation may include, but shall not be limited to, the following:

1. A search of Virginia criminal history records for the chief executive officer and chief financial officer of the organization. Information and authorization to conduct these records checks shall be provided in the permit application. In addition, the department shall require that the organization provides assurances that all other members involved in the management, operation, or conduct of charitable gaming meet the requirements of subdivision 13 of § 18.2-340.33 of the Code of Virginia. Applications may be denied if:

a. Any person participating in the management of any charitable gaming has ever been:

(1) Convicted of a felony; or

(2) Convicted of any misdemeanor involving fraud, theft, or financial crimes within the preceding five years.

b. Any person participating in the conduct of charitable gaming has been:

(1) Convicted of any felony in the preceding 10 years; or

(2) Convicted of any misdemeanor involving fraud, theft, or financial crimes within the preceding five years;

2. An inquiry as to whether the organization has been granted tax-exempt status pursuant to § 501(c) by the Internal Revenue Service and is in compliance with IRS annual filing requirements;

3. An inquiry as to whether the organization has entered into any contract with, or has otherwise employed for compensation, any persons for the purpose of organizing or managing, operating, or conducting any charitable gaming activity;

4. Inquiries into the finances and activities of the organization and the sources and uses of funds; and

5. Inquiries into the level of community or financial support to the organization and the level of community involvement in the membership and management of the organization.

F. The permit application for an organization that has not previously held a permit shall include:

1. A list of members participating in the management or operation of charitable gaming. For any organization that is not composed of members, a person who is not a bona fide member may volunteer in the conduct of a charitable game as long as that person is directly supervised by a bona fide official member of the organization;

2. A copy of the articles of incorporation, bylaws, charter, constitution, or other appropriate organizing document;

3. A copy of the determination letter issued by the IRS under § 501(c) of the Internal Revenue Code, if appropriate, or a letter from the national office of an organization indicating the applicant organization is in good standing and is currently covered by a group exemption ruling. A letter of good standing is not required if the applicable national or state office has furnished the department with a listing of member organizations in good standing in the Commonwealth as of January 1 of each year and has agreed to promptly provide the department any changes to the listing as they occur;

4. A copy of the organization's most recent annual financial statement and balance sheet or most recent Form 990 that has been filed with the IRS;

5. A copy of the written lease or proposed written lease agreement and all other agreements if the organization rents or intends to rent a facility where bingo is or will be conducted. Information on the lease shall include name, address, and phone number of the landlord; maximum occupancy of the building; and the rental amount per session; and

6. An authorization by an officer or other appropriate official of the organization to permit the department to determine whether the organization has been investigated or examined by the IRS in connection with charitable gaming activities during the previous three years.

G. Copies of minutes of meetings of the organization and any contracts with landlords or suppliers to which the organization is or may be a party may be requested by the department prior to rendering a permitting decision.

H. Organizations applying to renew a permit previously issued by the department shall submit articles of incorporation, bylaws, charter, constitution, or other organizing document, and IRS determination letter only if there are any amendments or changes to these documents that are directly related to the management, operation, or conduct of charitable gaming.

I. Organizations may request permits to conduct joint bingo games as provided in § 18.2-340.29 of the Code of Virginia.

1. In the case of a joint game, all the organizations shall file a permit application.

2. The nonrefundable permit fee for joint games shall be a total of $200. Volunteer fire departments or rescue squads or auxiliary units thereof that have been recognized in accordance with § 15.2-955 of the Code of Virginia shall be exempt from the payment of applications fees.

3. A single permit shall be issued in the names of all the organizations conducting a joint game. All restrictions and prohibitions applying to single organizations shall apply to qualified organizations jointly conducting bingo games pursuant to § 18.2-340.29 of the Code of Virginia.

4. No charitable gaming shall be conducted prior to the issuance of a joint permit.

5. Applications for joint games shall include an explanation of the division of manpower, costs, and proceeds for the joint game.

J. An organization wishing to change dates, times, or locations of its charitable gaming shall request a change in the permit. Change requests shall be made in writing on a form prescribed by the department at least 30 days in advance of the proposed effective date.

K. Changes in dates, times, or locations due to inclement weather, disasters, or other circumstances outside the organization's control may be made without a change in the permit. The organization shall request such a change on a form prescribed by the department as soon as the necessity for the change is known.

L. An organization may sell raffle tickets for a drawing to be held outside of the Commonwealth of Virginia in the United States provided:

1. The raffle is conducted by the organization in conjunction with a meeting outside the Commonwealth of Virginia or with another organization that is licensed to conduct raffles outside the Commonwealth of Virginia;

2. The raffle is conducted in accordance with these regulations and the laws and regulations of the state where the drawing is to be held; and

3. The portion of the proceeds derived from the sale of raffle tickets in the Commonwealth is reported to the department.

M. Any permitted organization that ceases to conduct charitable gaming shall immediately notify the department in writing and provide the department a report as to the disposition of all unused gaming supplies on a form prescribed by the department.

11VAC15-40-40. Suspension, revocation, or denial of permit.

A. Pursuant to § 18.2-340.20 of the Code of Virginia, the department may suspend, revoke, or deny the permit to conduct charitable gaming of any organization for cause including, but not limited to, any of the following reasons:

1. The organization is found to be in violation of or has failed to meet any of the requirements of the statutes or regulations governing the operation, management, and conduct of charitable gaming in the Commonwealth.

2. The organization is found to be not in good standing with its state or national organization.

3. The IRS revokes or suspends the organization's tax-exempt status.

4. The organization willfully and knowingly provides false information in its application for a permit to conduct charitable gaming.

5. The organization is found to have a member involved in the management, operation, or conduct of its charitable gaming who has been convicted of any felony or any misdemeanor as follows:

a. For any person participating in the management or operation of any charitable gaming:

(1) Convicted of a felony; or

(2) Convicted of any misdemeanor involving fraud, theft, or financial crimes within the preceding five years.

b. For any person participating in the conduct of charitable gaming:

(1) Convicted of any felony within the preceding 10 years; or

(2) Convicted of any misdemeanor involving fraud, theft, or financial crimes within the preceding five years.

B. The failure to meet any of the requirements of § 18.2-340.24 of the Code of Virginia shall cause the denial of the permit, and no organization shall conduct any charitable gaming until the requirements are met and a permit is obtained.

C. Except when an organization fails to meet any of the requirements of § 18.2-340.24 of the Code of Virginia, in lieu of suspending, revoking, or denying a permit to conduct charitable gaming, the department may afford an organization an opportunity to enter into a compliance agreement specifying additional conditions or requirements as it may deem necessary to ensure an organization's compliance with the statute and regulations governing the conduct of charitable gaming activities and may require that an organization participates in such training as is offered by the department.

D. If a permit is suspended, the department shall set the terms of the suspension, which shall include the length of the suspension and a requirement that, prior to reinstatement of

the permit, the organization shall submit a remedial business plan to address the conditions that resulted in the suspension.

Article 2
Conduct of Games, Rules of Play, Electronic Bingo

11VAC15-40-50. Conduct of bingo, instant bingo, pull-tabs, seal cards, event games, and raffles.

A. Organizations subject to this chapter shall post their permit at all times on the premises where charitable gaming is conducted.

B. No individual shall provide any information or engage in any conduct that alters or is intended to alter the outcome of any charitable game.

C. Individuals under 18 years of age may play bingo provided such persons are accompanied by a parent or legal guardian. It shall be the responsibility of the organization to ensure that such individuals are eligible to play. An organization's house rules may further limit the play of bingo or purchase raffle tickets by minors.

D. Individuals under the age of 18 may sell raffle tickets for a qualified organization raising funds for activities in which they are active participants.

E. No individual under the age of 18 may participate in the management or operation of bingo games. Individuals 14 through 17 years of age may participate in the conduct of a bingo game provided the organization permitted for charitable gaming obtains and keeps on file written parental consent from the parent or legal guardian and verifies the date of birth of such youth. An organization's house rules may further limit the involvement of minors in the conduct of bingo games.

F. No qualified organization shall sell any instant bingo, pull-tab, seal card, event game card, or electronic game card to any individual under 18 years of age. No individual under 18 years of age shall play or redeem any instant bingo, pull-tab, seal card, event game card, or electronic game card.

G. Unless otherwise prohibited by the Code of Virginia or this chapter, nonmembers who are under the direct supervision of a bona fide member may participate in the conduct of bingo.

H. All volunteer game workers shall have in their possession a picture identification, such as a driver's license or other government-issued identification, and shall make the picture identification available for inspection upon request by a department agent while participating in the management, operation, or conduct of a bingo game.

I. A game manager who is a bona fide member of the organization and is designated by the organization's management as the person responsible for the operation of the bingo game during a particular session shall be present any time a bingo game is conducted.

J. Organizations shall ensure that all charitable gaming equipment is in working order before charitable gaming activities commence.

K. Any organization selling bingo, instant bingo, pull-tabs, seal cards, event game cards, or electronic game cards shall:

1. Maintain a supplier's invoice or a legible copy thereof at the location where the gaming is taking place and cards are sold. The original invoice or legible copy shall be stored in the same storage space as the gaming supplies. All gaming supplies shall be stored in a secure area that has access limited only to bona fide members of the organization; and

2. Pay for all gaming supplies only by a check drawn on the charitable gaming account of the organization.

A complete inventory of all such gaming supplies shall be maintained by the organization on the premises where the gaming is being conducted.

L. A volunteer working a bingo session may receive complimentary food and nonalcoholic beverages provided on premises, as long as the retail value of such food and beverages does not exceed $15 for each session.

M. Permitted organizations shall not commingle records, supplies, or funds from permitted activities with those from instant bingo, pull-tabs, seal cards, event game cards, or electronic game cards sold in social quarters in accordance with § 18.2-340.26:1 of the Code of Virginia.

N. Individuals who are not members of an organization or are members who do not participate in any charitable gaming activities may be paid reasonable fees for preparation of quarterly and annual financial reports.

O. No free packs, free electronic bingo devices, discounts, or remuneration in any other form shall be provided directly or indirectly to volunteers, members of their family, or individuals residing in their household. The reduction of tuition, dues, or any fees or payments due as a result of a member or shareholder, or anyone in their household, working bingo games or raffles is prohibited.

P. Individuals providing security for an organization's charitable gaming activity shall not participate in the charitable gaming activity and shall not be compensated with charitable gaming supplies or with rentals of electronic bingo devices.

Q. No organization shall award any prize money or any merchandise valued in excess of the amounts specified by the Code of Virginia.

R. Multiple bingo sessions shall be permitted in a single premise as long as the sessions are distinct from one another and are not used to advertise or do not result in the awarding of more in prizes than is permitted for a single qualified organization. All leases for organizations to conduct charitable gaming in a single premise shall ensure gaming

activity is separated by an interval of at least 30 minutes. Bingo sales for the subsequent session may take place during the 30-minute break once the building is cleared of all patrons and workers from the previous session.

S. All bingo and instant bingo, pull-tabs, seal card, event game card, or electronic game card sales, play, and redemption must occur within the time specified on the charitable gaming permit.

T. Instant bingo, pull-tabs, seal cards, event game cards, or electronic game cards shall only be sold in conjunction with a bingo session, except as authorized by § 18.2-340.26:2 of the Code of Virginia. No instant bingo, pull-tabs, seal card, event game card, or electronic game card sales shall take place more than two hours before or after a session. If multiple sessions are held at the same location, no instant bingo, pull-tab, seal card, event game card, or electronic game card sales shall be conducted during the required 30-minute break between gaming activities. The department may take action if it believes that a bingo session is not legitimate or is being conducted in a manner such that instant bingo, pull-tabs, seal cards, event game cards, or electronic game cards are not being sold in conjunction with a bingo session.

U. Only a volunteer game worker of qualified organizations may rent, exchange, or otherwise provide electronic bingo devices to players.

V. A qualified organization shall conduct only bingo games and raffles listed on a game program for that session. The program shall list all prize amounts. If the prize amounts are determined by attendance or at the end of a game, the game program shall list the attendance required for the prize amount or disclose that prizes shall be determined at the end of a game and the method for determining the prize amount. In such case, the organization shall announce the prize amount at the end of the game.

W. A qualified organization selling instant bingo, pull-tabs, seal cards, or electronic game cards shall post a flare provided by the manufacturer at the location where such cards are sold. All such sales and prize payouts shall be in accordance with the flare for that deal.

X. Only qualified organizations, facilities in which qualified organizations play bingo, and suppliers permitted by the department shall advertise a bingo game. Providing players with information about bingo games through printed advertising is permitted, provided the name of the qualified organization shall be in a type size equal to or larger than the name of the premises, the hall, or the word "bingo." Printed advertisements shall identify the use of proceeds percentage reported in the past quarter or fiscal year.

Y. Raffles that award prizes based on a percentage of gross receipts shall use prenumbered tickets.

Z. The following rules shall apply to instant bingo, pull-tab, seal card, or event game card dispensing devices:

1. A dispensing device shall only be used at a location and time during which a qualified organization holds a permit to conduct charitable gaming. Only cards purchased by an organization to be used during the organization's charitable gaming activity shall be in the dispensing device.

2. Keys to the dispensing area and coin/cash box shall be in the possession and control of the game manager or designee of the organization's board of directors at all times. Keys shall at all times be available at the location where the dispensing device is being used.

3. The game manager or designee shall provide access to the dispensing device to a department agent for inspection upon request.

4. Only a volunteer game worker of an organization may stock the dispensing device, remove cash, or pay winners' prizes.

AA. Organizations shall only purchase gaming supplies from a supplier who has a current permit issued by the department.

BB. An organization shall not tamper with bingo paper received from a supplier.

CC. The total amount of all discounts given by any organization during any fiscal year shall not exceed 1.0% of the organization's gross receipts.

11VAC15-40-60. Rules of play.

A. Each organization shall adopt "house rules" regarding conduct of the game. Such rules shall be consistent with the provisions of the law and this chapter. "House rules" shall be conspicuously posted or, at an organization's option, printed on the game program.

B. All players shall be physically present at the location where the bingo numbers for a bingo game are drawn to play the game or to claim a prize. Seal card prizes that can only be determined after a seal is removed or opened must be claimed within 30 days of the close of a deal. All other prizes must be claimed on the game date.

C. The following rules of play shall govern the sale of instant bingo, pull-tabs, and seal cards:

1. No cards that have been marked, defaced, altered, tampered with, or otherwise constructed in a manner that tends to deceive the public or affect the chances of winning or losing shall be placed into play.

2. Winning cards shall have the winning symbol or number defaced or punched immediately after redemption by the organization's authorized representative.

3. An organization may commingle unsold instant bingo cards and pull-tabs with no more than one additional deal. The practice of commingling deals shall be disclosed to the public via house rules or in a similar manner. Seal card deals shall not be commingled.

4. If a deal is not played to completion and unsold cards remain, the remaining cards shall be sold at the next session the same type of ticket is scheduled to be sold. If no future date is anticipated, the organization shall, after making diligent efforts to sell the entire deal, consider the deal closed or completed. The unsold cards shall be retained for three years following the close of the fiscal year and shall not be opened.

5. All seal card games purchased shall contain the sign-up sheet, the seals, and the cards packaged together in each deal.

6. Progressive seal card prizes not claimed within 30 days shall be carried forward to the next progressive game in progress and paid to the next progressive game prize winner.

D. No one involved in the conduct of bingo may play bingo at any session they have worked or intend to work. No one involved in the sale or redemption of any instant bingo, pull-tabs, seal cards, or electronic game cards may purchase directly or through others instant bingo, pull-tab, seal card, or electronic game card products from organizations they assist on the day they have worked or from any deal they have helped sell or redeem, whichever occurs later.

E. Electronic bingo.

1. Electronic bingo devices may be used by bingo players in the following manner:

a. Players may input into the device each number called or the device may automatically daub each number as the number is called;

b. Players must notify the game operator or caller of a winning pattern of bingo by a means other than use of the electronic device;

c. Players are limited to playing a maximum of 54 card faces per device per game;

d. Electronic bingo devices shall not be reserved for players. Each player shall have an equal opportunity to use the available devices on a first come, first served basis;

e. Each electronic bingo device shall produce a player receipt with the organization name, date, time, location, sequential transaction or receipt number, number of electronic bingo cards loaded, cost of electronic bingo cards loaded, and date and time of the transaction. Images of cards or faces stored in an electronic device must be exact duplicates of the printed faces if faces are printed;

f. Department agents may examine and inspect any electronic bingo device and related system. Such examination and inspection shall include immediate access to the device and unlimited inspection of all parts and associated systems and may involve the removal of equipment from the game premises for further testing;

g. All electronic bingo devices must be loaded or enabled for play on the premises where the game will be played;

h. All electronic bingo devices shall be rented or otherwise provided to a player only by an organization and no part of the proceeds of the rental of such devices shall be paid to a landlord, or his employee, agent, or member of his immediate family; and

i. If a player's call of a bingo is disputed by another player, or if a department agent makes a request, one or more cards stored on an electronic bingo device shall be printed by the organization.

2. Players may exchange a defective electronic bingo device for another device provided a disinterested player verifies that the device is not functioning. A disinterested player shall also verify that no numbers called for the game in progress have been keyed into the replacement device prior to the exchange.

F. The following rules of play shall govern the conduct of raffles:

1. Before a prize drawing, each stub or other detachable section of each ticket sold shall be placed into a receptacle from which the winning tickets shall be drawn. The receptacle shall be designed so that each ticket placed in it has an equal chance to be drawn.

2. All prizes shall be valued at fair market value.

G. The following rules shall apply to "decision bingo" games:

1. Decision bingo shall be played on bingo cards in the conventional manner.

2. Players shall enter a game by paying a predetermined amount for each card face in play.

3. Players shall pay a predetermined fee for each set of three bingo numbers called for each card in play.

4. The prize amount shall be the total of all fees not to exceed the prize limit set forth for regular bingo in § 18.2-340.33 of the Code of Virginia. Any excess funds shall be retained by the organization.

5. The predetermined amounts in subdivisions 2 and 3 of this subsection shall be printed in the game program. The

prize amount for a game shall be announced before the prize is paid to the winner.

H. The following rules shall apply to "treasure chest" games:

1. The organization shall list the treasure chest game on the bingo game program as a "Treasure Chest Raffle."

2. The organization shall have house rules posted that describe how the game is to be played.

3. The treasure chest participant shall only be selected through some other authorized charitable game at the same bingo session.

4. The organization shall account for all funds as treasure chest/raffle sales on the session reconciliation form.

5. If the player does not open the lock on the treasure chest, the game manager or his designee shall proceed to try every key until the correct key opens the treasure chest lock to show all players that one of the keys will open the lock.

I. The following rules shall apply to progressive bingo games:

1. Bingo paper sold for use in progressive bingo games shall conform to the standards set forth in 11VAC15-40-130.

2. Organizations shall not include in admission packs the bingo paper intended for use in progressive bingo games.

3. Any progressive bingo game, its prize, and the number of bingo numbers to be called shall be clearly announced before the progressive bingo game is played and shall be posted on the premises where the progressive bingo game is played during each session that a progressive bingo game is played.

4. Pricing for a progressive bingo game card or sheet shall be listed on the game program.

5. If the predetermined pattern is not covered within the predetermined number of bingo numbers to be called, then the number of bingo numbers called will increase by one number for each subsequent session the progressive game is played.

6. If the predetermined pattern is not covered within the predetermined number of bingo numbers to be called for that progressive bingo game, then the game will continue as a regular bingo game until the predetermined pattern is covered and a regular bingo prize is awarded.

7. The prize for any progressive bingo game shall be in accordance with the provisions of § 18.2-340.33 of the Code of Virginia.

J. The following rules shall apply to "WINGO":

1. "WINGO" shall be played only for the hearing-impaired players.

2. "WINGO" shall utilize a visual device such as an oversized deck of cards in place of balls selected from a blower.

3. A caller must be in an area visible to all players and shall randomly select cards or other visual devices one at a time and display them so that all players can see them.

4. The organization must have house rules for "WINGO" and the rules shall identify how players indicate that they have won.

5. All financial reporting shall be consistent with reporting for a traditional bingo game.

K. The following rules of play shall apply to event games:

1. No instant bingo cards or pull-tabs that have been marked, defaced, altered, tampered with, or otherwise constructed in a manner that tends to deceive the public or affect the chances of winning or losing shall be placed into play.

2. Instant bingo cards and pull-tabs used in an event game shall not be offered for sale or sold at a purchase price other than the purchase price indicated on the flare for that particular deal.

3. The maximum prize amount for event games shall not exceed the amount set forth in § 18.2-340.33 (9) of the Code of Virginia for instant bingo, pull-tab, or seal card.

4. A sign-up sheet is not required for event games in which the winner or winners are determined using a seal card.

5. Organizations shall determine the winner or winners of event games during the same bingo session in which the instant bingo cards or pull-tabs are sold.

6. An authorized representative of the organization shall deface or punch the winning instant bingo cards or winning pull-tabs immediately after redemption.

7. If unsold bingo cards or unsold pull-tabs remain, the unsold cards shall be retained for three years following the close of the fiscal year and shall not be opened.

Article 3
Bank Accounts, Recordkeeping, Financial Reporting, Audits, Fees

11VAC15-40-70. Bank accounts.

A. A qualified organization shall maintain a charitable gaming bank account that is separate from any other bank account and all gaming receipts shall be deposited into the charitable gaming bank account.

B. Disbursements for expenses other than prizes and reimbursement of meal expenses shall be made by check directly from a charitable gaming account.

C. All charitable gaming bank account records, including but not limited to monthly bank statements, canceled checks or facsimiles thereof, and reconciliations, shall be maintained for three years following the close of a fiscal year.

D. All receipts from each session of bingo games and instant bingo, pull-tabs, or seal cards shall be deposited by the second business day following the session at which they were received.

E. Raffle proceeds shall be deposited into the qualified organization's charitable gaming bank account no later than the end of the calendar week following the week during which the organization received the proceeds.

11VAC15-40-80. Recordkeeping.

A. In addition to the records required by § 18.2-340.30 D of the Code of Virginia, qualified organizations conducting bingo shall maintain a system of records for a minimum of three years, unless otherwise specified for each gaming session on forms prescribed by the department, or reasonable facsimiles of those forms approved by the department, that include:

1. Charitable gaming supplies purchased and used;

2. A session reconciliation form and an instant bingo, pull-tab, seal card, or electronic game card reconciliation form completed and signed within 48 hours of the end of the session by the bingo manager;

3. All discounts provided;

4. A reconciliation to account for cash received from floor workers for the sale of extra bingo sheets for any game;

5. Number of electronic bingo devices rented, unique serial numbers of such devices, number of faces sold by each unit, and a summary report for each session to include date, time, location, and detailed information on income and expenses;

6. An admissions control system that provides a cross-check on the number of players in attendance and admission sales. This may include a ticket control system, cash register, or any similar system;

7. All operating expenses including rent, advertising, and security. Copies of invoices for all such expenses shall also be maintained;

8. Expected and actual receipts from games played on hard cards and number of games played on hard cards;

9. A record of the name and address of each winner for all seal cards; in addition, the winning ticket and seal card shall be maintained for a minimum of 90 days after the session;

10. A record of all door prizes awarded; and

11. For any prize or jackpot of a value that meets or exceeds the reporting requirements in the Internal Revenue Service's Publication 3079, the name and address of each individual to whom any such prize or jackpot is awarded and the amount of the award.

B. Qualified organizations conducting raffles shall have a recordkeeping system to account for cash receipts, cash disbursements, raffle tickets purchased or sold, and prizes awarded. All records shall be maintained for three years from the close of the fiscal year. The recordkeeping system shall include:

1. Invoices for the purchase of raffle tickets, which shall reflect the following information:

a. Name and address of supplier;

b. Name of purchaser;

c. Date of purchase;

d. Number of tickets printed;

e. Ticket number sequence for tickets printed; and

f. Sales price of individual ticket;

2. A record of cash receipts from raffle ticket sales by tracking the total number of tickets available for sale, the number issued to sellers, the number returned, the number sold, and reconciliation of all raffle sales to receipts;

3. Serial numbers of tickets for raffle sales initiated and concluded at a bingo game or sequentially numbered tickets, which shall state the name, address, and telephone number of the organization, the prize or prizes to be awarded, the date of the prize drawing or selection, the selling price of the raffle ticket, and the charitable gaming permit number;

4. For any raffle prize of a value that meets or exceeds the reporting requirements in the Internal Revenue Service's Publication 3079, receipts on which prize winners must provide printed name, residence address, and the amount and description of the prize received; and

5. Deposit records of the required weekly deposits of raffle receipts.

C. All raffle tickets shall have a detachable section; be consecutively numbered with the detachable section having the same number; provide space for the purchaser's name, complete address, and telephone number; and state (i) the name and address of the organization; (ii) the prize or prizes to be awarded; (iii) the date, time and location of the prize drawing; (iv) the selling price of the ticket; and (v) the charitable gaming permit number. Winning tickets and unsold

tickets shall be maintained for three years from the close of the fiscal year.

D. All unused charitable gaming supplies shall either be returned for refund to the original supplier in unopened original packaging in resalable condition as determined by the supplier or turned in to the department for destruction. The organization shall maintain a receipt for all such supplies returned to the supplier or turned in to the department.

11VAC15-40-90. Financial reporting, penalties, inspections, and audits.

A. Each charitable gaming permit holder shall file an annual report of receipts and disbursements by March 15 of each year on a form prescribed by the department. The annual report shall cover the activity for the fiscal year.

B. The annual report shall be accompanied by the audit and administration fee as established by the department for the fiscal year unless the fee has been remitted with quarterly reports or the organization is exempt from payment of the fee pursuant to § 18.2-340.23 of the Code of Virginia.

C. An organization desiring an extension to file its annual report for good cause shall request the extension in writing on a form prescribed by the department and shall pay the projected audit and administration fee, unless exempt from payment of the fee pursuant to § 18.2-340.23 of the Code of Virginia. The extension request and payment of projected fees shall be made in accordance with the provisions of § 18.2-340.30 of the Code of Virginia.

D. Unless exempted by § 18.2-340.23 of the Code of Virginia, qualified organizations realizing any gross gaming receipts in any calendar quarter shall file a quarterly report of receipts and disbursements on a form prescribed by the department as follows:

Quarter Ending	Date Due
March 31	June 1
June 30	September 1
September 30	December 1
December 31	March 1

Qualified organizations shall submit quarterly reports with the appropriate audit and administration fee unless the organization is exempt from payment of the fee pursuant to § 18.2-340.23 of the Code of Virginia. An annual financial report may substitute for a quarterly report if the organization has no further charitable gaming income during the remainder of the reporting period and the annual report is filed by the due date for the applicable calendar quarter.

E. An organization desiring an extension to file its quarterly report for good cause shall request the extension in writing on a form prescribed by the department and shall pay the projected audit and administration fee unless exempt from payment of the fee pursuant to § 18.2-340.23 of the Code of Virginia. The extension request and payment of projected fees shall be made in accordance with the provisions of § 18.2-340.30 of the Code of Virginia.

F. Organizations failing to file required reports, request an extension, or make fee payments when due shall be charged a penalty of $25 per day from the due date until such time as the required report is filed.

G. Any qualified organization in possession of funds derived from charitable gaming (including those who have ceased operations), regardless of when such funds may have been received or whether it has a valid permit from the department, shall file an annual financial report on a form prescribed by the department on or before March 15 of each year until such funds are depleted. If an organization ceases the conduct of charitable gaming, it shall provide the department with the name of an individual who shall be responsible for filing financial reports. If no such information is provided, the president of an organization shall be responsible for filing reports until all charitable gaming proceeds are depleted.

H. If an organization has been identified through inspection, audit, or other means as having deficiencies in complying with statutory or regulatory requirements or having ineffective internal controls, the department may impose restrictions or additional recordkeeping and financial reporting requirements.

I. Any records deemed necessary to complete an inspection, audit, or investigation may be collected by the department, its employees, or its agents from the premises of an organization or any location where charitable gaming is conducted. The department shall provide a written receipt of such records at the time of collection.

11VAC15-40-100. Use of proceeds.

A. All payments by an organization intended as use of proceeds must be made by check written from the organization's charitable gaming account.

B. Use of proceeds payments may be made for scholarship funds or the future acquisition, construction, remodeling, or improvement of real property or the acquisition of other equipment or vehicles to be used for religious, charitable, educational, or community purposes. In addition, an organization may obtain department approval to establish a special fund account or an irrevocable trust fund for special circumstances. Transfers to such an account or an irrevocable trust fund from the organization's charitable gaming account may be included as a use of proceeds if the payment is authorized by an organization's board of directors.

No payments made to such a special fund account shall be withdrawn for other than the specified purpose unless prior notification is made to the department.

C. Expenditures of charitable gaming funds for social or recreational activities or for events, activities, or programs that are open primarily to an organization's members and their

families shall not qualify as use of proceeds unless substantial benefit to the community is demonstrated.

D. Payments made to or on behalf of indigent, sick, or deceased members or their immediate families shall be allowed as use of proceeds provided they are approved by the organization's board of directors and the need is documented.

E. Payments made directly for the benefit of an individual member, member of his family, or person residing in his household shall not be allowed as a use of proceeds unless authorized by law or elsewhere in this chapter.

F. Use of proceeds payments by an organization shall not be made for any activity that is not permitted by federal, state, or local laws or for any activity that attempts to influence or finance directly or indirectly political persons or committees or the election or reelection of any person who is or has been a candidate for public office.

G. Organizations shall maintain details of all use of proceeds disbursements for a minimum of three years and shall make this information available to the department upon request.

H. The department may disallow a use of proceeds payment to be counted against the minimum percentage referred to in 11VAC15-40-20 D. If any payment claimed as use of proceeds is subsequently disallowed, an organization may be allowed additional time as specified by the department to meet minimum use of proceeds requirements.

Article 4
Rent

11VAC15-40-110. Requirements regarding renting premises, agreements, and landlord participation.

A. No organization shall rent or use any leased premises to conduct charitable gaming unless all terms for rental or use are set forth in a written agreement and signed by the parties thereto prior to the issuance of a permit to conduct charitable gaming. A qualified organization that leases a building or other premises that is utilized in whole or in part for the purpose of conducting charitable gaming more frequently than two calendar days in one calendar week shall only lease such premises directly from (i) a qualified organization that is exempt from taxation pursuant to § 501 (c) of the Internal Revenue Code or (ii) any county, city, or town.

B. Organizations shall not make payments to a landlord except by check drawn on the organization's charitable gaming account.

C. No landlord, his agent or employee, member of his immediate family, or person residing in his household shall make directly or indirectly a loan to any officer, director, game manager, or entity involved in the management, operation, or conduct of charitable gaming of an organization in Virginia that leases its charitable gaming facility from the landlord.

D. No landlord, his agent or employee, member of his immediate family, or person residing in his household shall make any direct or indirect payment to any officer, director, game manager, or entity involved in the management, operation, or conduct of charitable gaming conducted at a facility rented from the landlord in Virginia unless the payment is authorized by the lease agreement and is in accordance with the law.

E. No landlord, his agent or employee, member of his immediate family, or person residing in the same household shall at charitable games conducted on the landlord's premises:

1. Participate in the management, operation, or conduct of any charitable games;

2. Sell, lease, or otherwise provide any bingo supplies including, but not limited to, bingo cards, pull-tab cards, electronic game cards, or other game pieces; or

3. Require as a condition of the lease or contract that a particular manufacturer, distributor, or supplier of bingo supplies is used by the organization.

"Bingo supplies" as used in this chapter shall not include glue, markers, or tape sold from concession stands or from a location physically separated from the location where bingo supplies are normally sold.

F. No member of an organization involved in the management, operation, or conduct of charitable gaming shall provide any services to a landlord or be remunerated in any manner by the landlord of the facility where an organization is conducting its charitable gaming.

Part III
Suppliers

11VAC15-40-120. Suppliers of charitable gaming supplies: application, qualifications, suspension, revocation or refusal to renew permit, maintenance, and production of records.

A. Prior to providing any charitable gaming supplies, a supplier shall submit an application on a form prescribed by the department and receive a permit. A $1,000 application fee payable to the Treasurer of Virginia is required. In addition, a supplier must be authorized to conduct business in the Commonwealth of Virginia, which may include, but not be limited to, registration with the State Corporation Commission, the Department of Taxation, and the Virginia Employment Commission. The actual cost of background investigations for a permit may be billed by the department to an applicant. The department shall act on an application within 90 days of receipt of the application.

B. The department may refuse to issue a permit or may suspend or revoke a permit if an officer, director, employee, agent, or owner:

1. Is operating without a valid license, permit, or certificate as a supplier or manufacturer in any state in the United States;

2. Fails or refuses to recall a product as directed by the department;

3. Conducts business with unauthorized entities or is not authorized to conduct business in the Commonwealth of Virginia;

4. Has been convicted of or pleaded nolo contendere to any crime as specified by § 18.2-340.34 B of the Code of Virginia; has had any license, permit, certificate, or other authority related to activities defined as charitable gaming in the Commonwealth suspended or revoked in the Commonwealth or in any other jurisdiction; has failed to file or has been delinquent in excess of one year in the filing of any tax returns or the payment of any taxes due the Commonwealth; or has failed to establish a registered office or registered agent in the Commonwealth if so required by § 13.1-634 or 13.1-763 of the Code of Virginia. As this provision relates to employees or agents, it shall only apply to individuals involved in sales to or solicitations of customers in the Commonwealth of Virginia;

5. Fails to notify the department within 20 days of the occurrence, knowledge, or receipt of the filing of any administrative or legal action relating to charitable gaming or the distribution of charitable gaming supplies involving or concerning the supplier, any officers or directors, employees, agent, or owner during the term of its permit;

6. Fails to provide to the department upon request a current Letter for Company Registration on file with the U.S. Department of Justice-Gambling Devices Registration Unit, if required in accordance with The Gambling Devices Act of 1962, 15 USC §§ 1171-1178, for any device that it sells, distributes, services, or maintains in the Commonwealth of Virginia; or

7. Has been engaged in conduct that would compromise the department's objective of maintaining the highest level of integrity in charitable gaming.

C. A supplier shall not sell, offer to sell, or otherwise provide charitable gaming supplies for use by anyone in the Commonwealth of Virginia other than to an organization with a permit from the department or another permitted supplier. However, a supplier may:

1. Sell charitable gaming supplies to an organization that expects to gross the amount set forth in § 18.2-340.23 of the Code of Virginia or less in any 12-month period, providing that the amount of such purchase would not be reasonably expected to produce more than the amount set forth in § 18.2-340.23 of the Code of Virginia in gross sales. For each such organization, the supplier shall maintain the name, address, and telephone number. The supplier shall also obtain a written and signed statement from an officer or game manager of such organization confirming that gross receipts are expected to be the amount set forth in § 18.2-340.23 of the Code of Virginia or less. Such statement shall be dated and kept on file for three years from the end of a fiscal year.

2. Sell bingo cards and paper to persons or entities other than qualified organizations provided such supplies shall not be sold or otherwise provided for use in charitable gaming activities regulated by the department or in unlawful gambling activities. For each such sale, the supplier shall maintain the name, address, and telephone number of the purchaser. The supplier shall also obtain a written statement from the purchaser verifying that such supplies will not be used in charitable gaming or any unlawful gambling activity. Such statement shall be dated and kept on file for three years from the end of a fiscal year. Payment for such sales in excess of $50 shall be accepted in the form of a check.

3. Sell pull-tabs, seal cards, event game cards, and electronic game cards to organizations for use only upon the premises owned or exclusively leased by the organization and at such times as the portion of the premises in which the pull-tabs, seal cards, event game cards, or electronic game cards are sold is open only to members and their guests as authorized by § 18.2-340.26:1 of the Code of Virginia. Each such sale shall be accounted for separately and the accompanying invoice shall be clearly marked: "For Use in Social Quarters Only."

All such sales shall be documented pursuant to subsection H of this section and reported to the department pursuant to subsection J of this section. This provision shall not apply to the sale to landlords of equipment and video systems as defined in this chapter. Equipment and video systems shall not include dispensing devices, electronic bingo devices, and player devices.

D. A supplier shall not sell, offer to sell, or otherwise provide charitable gaming supplies to any individual or organization in the Commonwealth of Virginia unless the charitable gaming supplies are purchased or obtained from a manufacturer or another permitted supplier. Suppliers may take back for credit and resell supplies received from an organization with a permit that has ceased charitable gaming or is returning supplies not needed.

E. No supplier, supplier's agent, or employee may be involved in the management, operation, or conduct of charitable gaming in the Commonwealth of Virginia. No member of a supplier's immediate family or person residing in the same household as a supplier may be involved in the management, operation, or conduct of charitable gaming of any customer of the supplier in the Commonwealth of Virginia. No supplier, supplier's agent, or employee may

participate in any charitable gaming of any customer of the supplier in the Commonwealth of Virginia. For the purposes of this regulation, servicing of electronic devices shall not be considered conduct or participation.

F. The department shall conduct a background investigation prior to the issuance of a permit to any supplier. The investigation may include, but shall not be limited to, the following:

1. A search of the Virginia Central Criminal Records Exchange (CCRE) on all officers, directors, and owners; and

2. Verification of current compliance with Commonwealth of Virginia tax laws.

If the officers, directors, or owners are domiciled outside of the Commonwealth of Virginia, or have resided in the Commonwealth of Virginia for fewer than five years, a criminal history search conducted by the appropriate authority in any state in which they have resided during the previous five years shall be provided by the applicant.

G. Appropriate information and authorizations shall be provided to the department to verify information cited in subsection F of this section.

H. Suppliers shall document each sale or rental of charitable gaming supplies to an organization in the Commonwealth of Virginia on an invoice, which reflects the following:

1. Name, address, and OCG number of the organization;

2. Date of sale or rental and location where bingo supplies are shipped if different from the billing address;

3. Name, form number, and serial number of each deal of instant bingo, pull-tabs, seal cards, electronic game cards, or bundles and the number of cards in each deal;

4. Quantity of deals sold, the cost per deal, the selling price per card, the cash take-in per deal, and the cash payout per deal;

5. Serial number of the top sheet in each pack of disposable bingo paper, the number of sheets in each pack or pad, the cut and color, and the number of packs or pads sold;

6. Serial number for each series of uncollated bingo paper and the number of sheets sold;

7. Detailed information concerning the type, quantity, and individual price of any other charitable gaming supplies or related items including, but not limited to, concealed face bingo cards, hard cards, markers or daubers and refills, or any other merchandise. For concealed face bingo cards, the number of sets, price per set, and the serial number of each set shall be included;

8. Serial number of each player device, the form of the player device, the number of player devices sold or rented, and the physical address to which each player device is shipped;

9. Serial number and description of any other equipment sold or rented that is used to facilitate the distribution, play, and redemption of electronic game cards and the physical address to which the equipment is shipped; and

10. Any type of equipment, device, or product manufactured for or intended to be used in the conduct of charitable games including, but not limited to, designators, designator receptacles, number display boards, selection devices, dispensing machines, and verification devices.

I. Suppliers shall ensure that two copies of the detailed invoice are provided to the customer for each sale of charitable gaming supplies.

J. Each supplier shall provide a report to the department by March 1 of each year on sales of charitable gaming supplies for the fiscal year ending December 31 of the previous year to each organization in the Commonwealth of Virginia. This report shall be provided to the department on computer disk or other department-approved media. The report shall include the name and address of each organization and the following information for each sale or transaction:

1. Bingo paper sales including purchase price, description of paper to include number of sheets in pack and number of faces on sheet, and quantity of single sheets or packs shipped;

2. Deals of instant bingo, pull-tabs, seal cards, electronic game cards, or any other raffle sales including purchase price, deal name, deal form number, number of tickets in deal, ticket price, cash take-in per deal, cash payout per deal, and number of deals;

3. Electronic bingo device sales including purchase or rental price and number of units;

4. Equipment used to facilitate the distribution, play, and redemption of electronic game cards including purchase or rental price, description of equipment, number of units of each type of equipment, and the physical address to which the equipment is shipped; and

5. Sales of miscellaneous items such as daubers, markers, and other merchandise including purchase price, description of product, and number of units.

K. The department shall set manufacturing and testing criteria for all electronic bingo devices and other equipment used in the conduct of charitable gaming. An electronic bingo device shall not be sold, leased, or otherwise furnished to any person in the Commonwealth of Virginia for use in the conduct of charitable gaming until an identical sample device containing identical proprietary software has been certified by a testing facility that has been formally recognized by the department as a testing facility that upholds the standards of

integrity established by the department. The testing facility must certify that the device conforms, at a minimum, to the restrictions and conditions set forth in these regulations. Once the testing facility reports the test results to the department, the department will either approve or disapprove the submission and inform the manufacturer of the results within 10 business days. If any such equipment does not meet the department's criteria, it shall be recalled and shall not be distributed in the Commonwealth of Virginia. The cost of testing shall be borne by the manufacturer of such equipment.

L. Department employees shall have the right to inspect all electronic and mechanical equipment used in the conduct of charitable gaming.

M. Suppliers, their agents and employees, members of the supplier's immediate family, or persons residing in their household shall not make any loan directly or indirectly to any organization or officer, director, game manager, or entity involved in the management, operation, or conduct of charitable gaming of a supplier's customer located in the Commonwealth of Virginia.

N. No supplier, supplier's agent, or employee shall directly or indirectly provide a rebate, discount, or refund to any person other than an organization that purchases supplies or leases or purchases equipment from the supplier. All such transactions shall be recorded on the supplier's account books.

O. A supplier shall not rent, sell, or otherwise provide electronic bingo devices or equipment used to distribute, play, or redeem electronic game cards unless the supplier possesses a valid permit in the Commonwealth of Virginia.

P. A written agreement specifying the terms of lease or rental shall be required for any electronic bingo devices or equipment used to distribute, play, or redeem electronic game cards provided to an organization.

11VAC15-40-130. Construction and other standards for bingo, instant bingo, pull-tabs, seal cards, event games, raffles, electronic bingo devices, and instant bingo, pull-tab, and seal card dispensers.

A. No supplier shall knowingly sell or otherwise provide to an organization and no organization shall knowingly use bingo supplies unless they conform to the following construction standards:

1. Disposable paper sold shall be of sufficient weight and quality to allow for clearly readable numbers and to prevent ink from spreading, bleeding, or otherwise obscuring other numbers or cards.

2. Each sheet of disposable bingo paper shall be comprised of cards bearing a serial number. No serial number shall be repeated on or in the same style, series, and color of cards within a three-year period.

3. Disposable bingo paper assembled in books or packs shall not be separated except for single-sheet specials. This provision does not apply to two-part cards on which numbers are filled by players and one part is separated and provided to an organization for verification purposes.

4. Each unit of disposable bingo paper shall have an exterior label listing the following information:

a. Description of product;

b. Number of packs or loose sheets;

c. Series numbers;

d. Serial number of the top sheet;

e. Number of cases;

f. Cut of paper; and

g. Color of paper.

5. "Lucky Seven" bingo cards or electronic facsimiles thereof shall have a single face where seven numbers shall be chosen. "Lucky Seven" sheets or electronic facsimiles thereof shall have multiple faces where seven numbers shall be chosen per face.

B. No supplier shall knowingly sell or otherwise provide to an organization and no organization shall knowingly use instant bingo, pull-tab, seal cards, or event game cards unless they conform to the following construction standards:

1. Cards shall be constructed so that concealed numbers, symbols, or winner protection features cannot be viewed or determined from the outside of the card by using a high intensity lamp of 500 watts, with or without utilizing a focusing lens.

2. Deals shall be designed, constructed, glued, and assembled in a manner to prevent determination of a winning or losing ticket without removing the tabs or otherwise uncovering the symbols or numbers as intended.

3. Each card in a deal shall bear the same serial number. Only one serial number shall be used in a deal. No serial number used in a deal shall be repeated by the same manufacturer on that same manufacturer's form within a three-year period. The flare of each deal shall accompany the deal and shall have affixed to it the same serial number as the tickets in such deal.

4. Numbers or symbols on cards shall be fully visible in the window and shall be placed so that no part of a number or symbol remains covered when the tab is removed.

5. Cards shall be glued on all edges and around each window. Glue shall be of sufficient strength and type to prevent the undetectable separation or delamination of the card. For banded tickets, the glue must be of sufficient strength and quality to prevent the separation of the band from the ticket.

6. The following minimum information shall be printed on a card:

a. Break open pull-tab, instant bingo cards, and event game cards:

(1) Name of the manufacturer or its distinctive logo;

(2) Name of the game;

(3) Manufacturer's form number;

(4) Price per individual card or bundle;

(5) Unique minimum five-digit game serial number printed on the game information side of the card; and

(6) Number of winners and respective winning number or symbols and specific prize amounts unless accompanied by a manufacturer's preprinted publicly posted flare with that information.

b. Banded pull-tabs:

(1) Manufacturer;

(2) Serial number;

(3) Price per individual card or bundle unless accompanied by a manufacturer's preprinted publicly posted flare with that information; and

(4) Number of winners and respective winning numbers or symbols and prize amounts or a manufacturer's preprinted publicly posted flare giving that information.

7. All seal card games sold to organizations shall contain the sign-up sheet, seals, and cards packaged together in each deal.

C. Raffle tickets used independent of a bingo game must conform to the following construction standards:

1. Each ticket shall have a detachable section and shall be consecutively numbered.

2. Each section of a ticket shall bear the same number. The section retained by the organization shall provide space for the purchaser's name, complete address, and telephone number.

3. The following information shall be printed on the purchaser's section of each ticket:

a. Dates and times of drawings;

b. Locations of the drawings;

c. Name of the charitable organization conducting the raffle;

d. Price of the ticket;

e. Charitable gaming permit number; and

f. Prizes.

Exceptions to these construction standards are allowed only with prior written approval from the department.

D. Electronic bingo.

1. The department, at its discretion, may require additional testing of electronic bingo devices at any time. Such additional testing shall be at the manufacturer's expense and shall be a condition of the continued use of such device.

2. All electronic bingo devices shall use proprietary software and hardware or commonly available software and computers and shall be enabled for play on the premises where the game is to be played.

3. Each electronic bingo device shall have a unique identification number permanently coded into the software of such device. Manufacturers of electronic bingo devices shall employ sufficient security safeguards in designing and manufacturing the devices such that it may be verified that all proprietary software components are authentic copies of the approved software components and all functioning components of the device are operating with identical copies of approved software programs. The device must also have sufficient security safeguards so that any restrictions or requirements authorized by the department or any approved proprietary software are protected from alteration by unauthorized personnel. The device shall not contain hard-coded or unchangeable passwords. Security measures that may be employed to comply with these provisions include, but are not limited to, the use of dongles, digital signature comparison hardware and software, secure boot loaders, encryption, and key and callback password systems.

4. Electronic bingo devices shall not allow a player to create a card by the input of specific numbers on each card. Manufacturers shall ensure that an electronic bingo device does not allow for the play of any bingo card faces other than those verifiably purchased by the patron.

5. Electronic bingo devices shall not accept cash, currency, or tokens for play.

6. Electronic bingo devices shall require the manual entry of numbers as they are called, the manual verification of numbers as they have been electronically transmitted to the device, or the full automatic daubing of numbers as each number is called. During the play of a bingo game, the transmission of data to electronic bingo devices shall be limited to one-way communication to the device and shall consist only of the number called.

7. A device shall not allow the play of more than 54 cards per device per game.

8. The electronic bingo device system shall record a sequential transaction number or audit tracking number for

each transaction. The system shall not allow the manual resetting or changing of this number.

9. The system shall produce a receipt and a transaction log containing the following:

a. Organization name;

b. Location of bingo game;

c. Sequential transaction or receipt number;

d. Number of electronic bingo cards loaded;

e. Cost of electronic bingo cards loaded; and

f. Date and time of each transaction.

10. The system shall maintain and make available on demand a summary report for each session that includes the following:

a. Organization name;

b. Physical location of bingo game;

c. Date and time of each transaction;

d. Sequential transaction or receipt number;

e. Number of electronic bingo cards loaded;

f. Cost of electronic bingo cards loaded;

g. A transaction history correlating each electronic sale to the device identification number of the device on which the sale was played;

h. Sufficient information to identify voids, including the date and time of each voided transaction;

i. Sufficient information to identify device returns; and

j. Total gross receipts for each session.

11. Each device shall be programmed to automatically erase all stored electronic cards at the end of the last game of a session, within a set time from their rental to a player, or by some other clearance method approved by the department.

12. All devices shall be reloaded with another set of cards at the beginning of each session if the devices are to be reused at the same location.

E. In instances where a defect in packaging or in the construction of deals or electronic devices is discovered by or reported to the department, the department shall notify the manufacturer of the deals or devices containing the alleged defect. Should the department, in consultation with the manufacturer, determine that a defect exists, and should the department determine the defect affects game security or otherwise threatens public confidence in the game, the department may, with respect to deals or electronic devices for use still located within the Commonwealth of Virginia, require the supplier to:

1. Recall the deals or electronic devices affected that have not been sold or otherwise provided; or

2. Issue a total recall of all affected deals or electronic devices.

F. No instant bingo, pull-tab, or seal card dispenser may be sold, leased, or otherwise furnished to any person or organization in the Commonwealth of Virginia or used in the conduct of charitable gaming until an identical sample device containing identical proprietary software, if applicable, has been certified by a testing facility that has been formally recognized by the department as a testing facility that upholds the standards of integrity established by the department. The cost of testing shall be borne by the manufacturer of such equipment. In addition, suppliers and manufacturers of such dispensers shall comply with the requirements of The Gambling Devices Act of 1962 (15 USC §§ 1171-1178).

G. All instant bingo, pull-tab, or seal card dispensing devices must meet the following standards:

1. Each dispenser shall be manufactured in a manner that ensures a pull-tab ticket is dispensed only after insertion of United States currency or coinage into the dispenser. Such ticket and any change due shall be the only items dispensed from the machine.

2. Each dispenser shall be manufactured in a manner that ensures the device neither displays nor has the capability of displaying or otherwise identifying an instant bingo, pull-tab, or seal card winning or nonwinning ticket.

3. Each dispenser shall be manufactured in such a manner that any visual animation does not simulate or display rolling or spinning reels or produce audible music or enhanced sound effects.

4. Each dispenser shall be equipped with separate locks for the instant bingo, pull-tab, or seal card supply modules and money boxes. Locks shall be configured so that no one key will operate both the supply modules and money boxes.

H. The department may require additional testing of a dispensing device at any time to ensure that it meets construction standards and allows for fair play. Such tests shall be conducted at the cost of the manufacturer of such devices.

I. The face value of cards being dispensed shall match the amount deposited in the currency/coin acceptor less change provided.

11VAC15-40-140. Instant bingo, pull-tabs, seal cards, or event game cards randomization standards.

All instant bingo, pull-tabs, seal cards, or event game cards shall meet the following randomization standards:

1. Deals shall be assembled so that winning tickets are placed throughout each deal.

2. Deals shall be assembled and packaged in a manner that prevents isolation of winning cards due to variations in printing, graphics, colors, sizes, appearances of cut edges, or other markings of cards.

3. Winning cards shall be distributed and mixed among all other cards in a deal so as to eliminate any pattern between deals or portions of deals from which the location or approximate location of any winning card may be determined.

Part IV
Electronic Games of Chance Systems

Article 1
General Requirements

11VAC15-40-150. Approval of distributed pull-tab systems, validation systems, point-of-sale stations, and redemption terminals.

A. The department shall set manufacturing and testing criteria for all distributed pull-tab systems, validation systems, point-of-sale stations, redemption terminals, and other equipment used in the conduct of charitable gaming. A distributed pull-tab system, validation system, point-of-sale station, redemption terminal, or other equipment shall not be sold, leased, or otherwise furnished to any person in the Commonwealth of Virginia for use in the conduct of charitable gaming until an identical sample system or equipment containing identical software has been certified by a testing facility that has been formally recognized by the department as a testing facility that upholds the standards of integrity established by the department. The testing facility must certify that the distributed pull-tab system and associated hardware and software conform, at a minimum, to the requirements set forth in this chapter. Once the testing facility reports the test results to the department, the department will either approve or disapprove the distributed pull-tab system or system components and inform the manufacturer of the results within 10 business days. If any such system or equipment does not meet the department's criteria, it shall be recalled and shall not be distributed in the Commonwealth of Virginia. The cost of testing shall be borne by the manufacturer of such equipment.

B. No supplier shall knowingly sell or otherwise provide to an organization and no organization shall knowingly use a distributed pull-tab system, validation system, point-of-sale station, redemption terminal, or other equipment used to conduct charitable gaming unless it conforms to the requirements set forth in this regulation.

C. If a defect in a distributed pull-tab system, validation system, point-of-sale station, redemption terminal, or other equipment used to conduct charitable gaming is discovered by or reported to the department, the department shall notify the manufacturer of the system or equipment containing the alleged defect. Should the department, in consultation with the manufacturer, determine that a defect exists and should the department determine the defect affects game security or otherwise threatens public confidence in the game, the department may, with respect to any distributed pull-tab system, validation system, point of sale station, redemption terminal, or other equipment used to conduct charitable gaming still located within the Commonwealth of Virginia, require the supplier to issue a recall of all affected distributed pull-tab systems, validation systems, point-of-sale stations, redemption terminals, or other equipment.

Article 2
System Requirements

11VAC15-40-160. Distributed pull-tab system.

A distributed pull-tab system shall be dedicated primarily to electronic accounting, reporting, and the presentation, randomization, and transmission of electronic game cards to the player devices. It shall also be capable of generating the data necessary to provide the reports required within this article or otherwise specified by the department.

11VAC15-40-170. Dispensing of electronic game cards.

A distributed pull-tab system shall dispense, upon request, an electronic game card or cards. All games must be played without replacement, drawing from a single finite game set.

11VAC15-40-180. Game set requirements.

Each game set shall meet the following minimum requirements:

1. Each game set shall be made up of a finite number of electronic game cards;

2. The game set shall consist of a maximum of 25,000 electronic game cards;

3. All electronic game cards in a particular game set shall be of the same purchase price;

4. The maximum win amount awarded per any one electronic game card shall not exceed the value set forth for pull-tabs by § 18.2-340.33 of the Code of Virginia;

5. Each game set shall be assigned a unique serial number; and

6. After randomization, game sets may be broken into subsets of equal size. If game subsets are used, they shall each be assigned a unique serial number and be traceable to a parent game set.

11VAC15-40-190. Game set definition.

If the system has the capability to create a game set from a predefined set of criteria, the criteria must contain the following information:

1. Game ID;

2. Game set version;

3. Manufacturer;

4. Game name;

5. Paytable ID;

6. Purchase price per electronic game card;

7. Subset size;

8. Total number of subsets; and

9. Prize values with an associated index and frequency.

11VAC15-40-200. Data required to be available for each game set.

A. The following data shall be available prior to the opening of a game set for distribution and shall be maintained and be viewable both electronically and, if requested, by printed report, upon demand:

1. A unique serial number identifying each game set and/or subset;

2. A description of the game set sufficient to categorize the game set or subset relative to other game sets;

3. The total number of electronic game cards in the game set;

4. The number of game subsets to be created from the game set and the number of electronic game cards in each subset when applicable;

5. The payout percentage of the entire game set;

6. The purchase price per electronic game card assigned to the game set; and

7. Prize values with an associated index and frequency.

B. The following data shall be available subsequent to the completion of a game set and shall be maintained and viewable both electronically and, if requested, by printed report, upon demand:

1. A unique serial number identifying each game set and/or subset;

2. Description of the game set sufficient to categorize the game set relative to other game sets;

3. The total number of electronic game cards unsold;

4. The total number of electronic game cards purchased;

5. The time and date that the game set and/or each game subset became available for play;

6. The time and date that the game set and/or each game subset was completed or removed from play;

7. Location where game set and/or subset was played;

8. The final payout percentage of the game set when removed from play; and

9. The purchase price per electronic game card assigned to the game set.

C. In order to provide maximum game integrity, no audit or other determination of the status of any game set or any subset, including, but not limited to, a determination of the prizes won or prizes remaining to be won, shall be conducted by anyone while a game set or subset is in play without causing termination of the entire game set or subset. Only upon game set termination shall the details of the associated game set and subsets be revealed to the individual or individuals performing the audit.

D. Once terminated, a game set shall not be able to be reopened.

11VAC15-40-210. Security requirements.

A. A distributed pull-tab system computer must be in a locked, secure enclosure with key controls in place.

B. A distributed pull-tab system shall provide a means for terminating the game set if information about electronic game cards in an open game set has been accessed or at the discretion of the department. In such cases, traceability of unauthorized access including time and date, users involved, and any other relevant information shall be available.

C. A distributed pull-tab system shall not permit the alteration of any accounting or significant event information that was communicated from the player device without supervised access controls. In the event financial data is changed, an automated audit log must be capable of being produced to document the following:

1. Data element altered;

2. Data element value prior to alteration;

3. Data element value after alteration;

4. Time and date of alteration; and

5. Personnel that performed alteration.

D. A distributed pull-tab system must provide password security or other secure means of ensuring data integrity and enforcing user permissions for all system components through the following means:

1. All programs and data files must only be accessible via the entry of a password that will be known only to authorized personnel;

2. The distributed pull-tab system must have multiple security access levels to control and restrict different classes;

3. The distributed pull-tab system access accounts must be unique when assigned to the authorized personnel and shared accounts amongst authorized personnel must not be allowed;

4. The storage of passwords and PINs must be in an encrypted, nonreversible form; and

5. A program or report must be available that will list all registered users on the distributed pull-tab system including their privilege level.

E. All components of a distributed pull-tab system must have a password sign-on with two-level codes comprising the personal identification code and a personal password.

1. The personal identification code must have a length of at least six ASCII characters; and

2. The personal password must have a minimum length of six alphanumeric characters, which should include at least one nonalphabetic character.

F. A distributed pull-tab system must have the capability to control potential data corruption that can be created by multiple simultaneous log-ons by system management personnel.

1. A distributed pull-tab system shall specify which of the access levels allow for multiple simultaneous sign-ons by different users and which of the access levels do not allow for multiple sign-ons, and, if multiple sign-ons are possible, what restrictions, if any, exist; or

2. If a distributed pull-tab system does not provide adequate control, a comprehensive procedural control document must be drafted for the department's review and approval.

G. Distributed pull-tab system software components/modules shall be verifiable by a secure means at the system level. A distributed pull-tab system shall have the ability to allow for an independent integrity check of the components/modules from an outside source and is required for all control programs that may affect the integrity of the distributed pull-tab system. This must be accomplished by being authenticated by a third-party device, which may be embedded within the distributed pull-tab system software or having an interface or procedure for a third-party application to authenticate the component. This integrity check will provide a means for field verification of the distributed pull-tab system components.

H. A distributed pull-tab system may be used to configure and perform security checks on player devices, provided such functions do not affect the security, integrity, or outcome of any game and meets the requirements set forth in this regulation regarding program storage devices.

11VAC15-40-220. Backup and recovery.

A. A distributed pull-tab system computer shall have a separate physical medium for securely storing game sets or subsets on the computer, which shall be mirrored in real time by a backup medium.

B. All data required to be available or reported by this chapter must be retained for a period of not less than three years.

C. All storage of critical data shall utilize error checking and be stored on a nonvolatile physical medium.

D. The database shall be stored on redundant media so that no single failure of any portion of the system would result in the loss or corruption of data.

E. In the event of a catastrophic failure when the distributed pull-tab system cannot be restarted in any other way, it shall be possible to reload the distributed pull-tab system from the last viable backup point and fully recover the contents of that backup, to consist of at least the following information:

1. All significant events;

2. All accounting information;

3. Auditing information, including all open game sets and the summary of completed game sets; and

4. Employee files with access levels.

11VAC15-40-230. Electronic accounting and reporting.

A. One or more electronic accounting systems shall be required to perform reporting and other functions in support of distributed pull-tab system. The electronic accounting system shall not interfere with the outcome of any gaming function.

B. The following reporting capabilities must be provided by the electronic accounting system:

1. Electronic game card game set report – game sets in play. An electronic game card game set report must be available on demand for each game set currently in play. Game cards, outcomes, or prizes must not be revealed. The report must contain the following information:

a. A unique serial number identifying each game set and/or subsets;

b. A description of the game set sufficient to categorize the game set or subset relative to other game sets;

c. The total number of electronic game cards in the game set;

d. The number of game subsets to be created from the game set and the number of electronic game cards in each subset when applicable;

e. The theoretical payout percentage of the entire game set;

f. The purchase price per electronic game card assigned to the game set;

g. The time and date that the game set and/or each game subset became available for play; and

h. Location where the game set and/or subset is being played.

2. Electronic game card game set report – completed game set. An electronic game card game set report must be available on demand, for each completed game set. The report must contain the following information:

a. A unique serial number identifying each game set and/or subset;

b. Description of the game set sufficient to categorize the game set relative to other game sets;

c. The total number of electronic game cards unsold;

d. The total number of electronic game cards purchased;

e. The time and date that the game set and/or each game subset became available for play;

f. The time and date that the game set and/or each game subset was completed or removed from play;

g. Location where game set and/or subset was played;

h. The final payout percentage of the game set when removed from play; and

i. The purchase price per electronic game card assigned to the game set.

3. A report that shall indicate all prizes that exceed the threshold that triggers additional procedures to be followed for the purpose of compliance with federal tax reporting requirements. At a minimum, on a daily and monthly basis, the report shall provide the following information per player device:

a. The date and time won;

b. Location of prize award; and

c. Amount of each prize occurrence.

4. Liability report. A liability report shall provide a summary of the outstanding funds that carry from business day to business day. At a minimum, this report shall include:

a. Amount of prizes and/or vouchers that were awarded in dollars and cents, but have not yet been claimed that have not yet expired; and

b. Summary of all outstanding accounts.

5. Master reconciliation report. A master reconciliation report must be available on a per session basis, monthly basis, and quarterly basis at a minimum. A master reconciliation report shall include the following:

a. Total of all moneys used to purchase electronic game cards;

b. Total of all prizes, in dollars and cents, awarded from electronic game cards;

c. Total of all moneys inserted into a player device or provided to a cashier for the purchase of electronic game cards; and

d. Total of all moneys removed from a player device.

C. A distributed pull-tab system shall be capable of providing an electronic file in a format specified by the department on a periodic basis to a location specified by the department. The data to be reported will contain, at a minimum, the following items per session:

1. Organization identification;

2. Session date;

3. Total cash in;

4. Total cash out;

5. Total cash played;

6. Total cash won;

7. For all game sets on the system in play or in inventory:

a. Serial number;

b. Description;

c. Ticket price;

d. Number of subsets if applicable;

e. Number of tickets or number of tickets per subset;

f. Theoretical return percentage; and

g. Date game set was opened for play, when applicable; and

8. For all game sets completed or closed since the previous reporting date:

a. Serial number;

b. Description;

c. Ticket price;

d. Number of subsets, if applicable;

e. Number of tickets or number of tickets per subset;

f. Theoretical return percentage;

g. Date game set was opened;

h. Date game set was closed;

i. Total tickets sold;

j. Total dollars in;

k. Total prizes paid; and

l. Actual return percentage.

11VAC15-40-240. Randomization.

A. As used in this section, unless the context requires a different meaning:

"Card position" means the first card dealt, second card dealt in sequential order.

"Number position" means the first number drawn in sequential order.

B. A distributed pull-tab system shall utilize randomizing procedures in the creation of game sets for electronic game cards or externally generated randomized game sets that have been created using a method previously approved by the department.

C. Any random number generation, shuffling, or randomization of outcomes used in connection with a distributed pull-tab system must be by use of a random number generation application that has successfully passed standard tests for randomness and unpredictability including but not limited to:

1. Each card position or number position satisfies the 99% confidence limit using the standard chi-squared analysis. "Chi-squared analysis" is the sum of the ratio of the square difference between the expected result and the observed result to the expected result.

2. Each card position or number position does not produce a significant statistic with regard to producing patterns of occurrences. Each card position or number position will be considered random if it meets the 99% confidence level with regard to the "run test" or any similar pattern testing statistic. The "run test" is a mathematical statistic that determines the existence of recurring patterns within a set of data.

3. Each card position or number position is independently chosen without regard to any other card or number drawn within that game play. This test is the "correlation test." Each pair of card positions or number positions is considered random if it meets the 99% confidence level using standard correlation analysis.

4. Each card position or number position is independently chosen without reference to the same card position or number position in the previous game. This test is the "serial correlation test." Each card position or number position is considered random if it meets the 99% confidence level using standard serial correlation analysis.

11VAC15-40-250. Communications and network requirements.

A. Where the distributed pull-tab system components are linked with one another in a network, communication protocols shall be used that ensure that erroneous data or signals will not adversely affect the operations of any such system components.

B. All data communication shall incorporate an error detection and correction scheme to ensure the data is transmitted and received accurately.

C. Connections between all components of the distributed pull-tab system shall only be through the use of secure communication protocol(s) that are designed to prevent unauthorized access or tampering, employing Advanced Encryption Standard (AES), or equivalent encryption.

D. The minimum width (size) for encryption keys is 112 bits for symmetric algorithms and 1024 bits for public keys.

E. There must be a secure method implemented for changing the current encryption key set. It is not acceptable to only use the current key set to "encrypt" the next set.

F. There must be a secure method in place for the storage of any encryption keys. Encryption keys must not be stored without being encrypted themselves.

G. If a wireless network is used, wireless products used in conjunction with any gaming system or system component must meet the following minimum standards:

1. Employ a security process that complies with the Federal Information Processing Standard 140-2 (FIPS 140-2); or

2. Employ an alternative method, as approved by the department.

11VAC15-40-260. Significant events.

The following significant events, if applicable, shall be collected from the player device or point of sale and communicated to the system for storage and a report of the occurrence of the significant event must be made available upon request:

1. Power resets or power failure.

2. Communication loss between a player device and any component of the distributed pull-tab system.

3. Player device jackpot (any award in excess of the single win limit of the player device).

4. Door openings (any external door that accesses a critical area of the player device).

5. Bill validator errors:

a. Stacker full (if supported); and

b. Bill jam.

6. Printer errors:

a. Printer empty; and

b. Printer disconnect or failure.

7. Corruption of the player device RAM or program storage device.

8. Any other significant events as defined by the protocol employed by the distributed pull-tab system.

11VAC15-40-270. Validation system and redemption.

A distributed pull-tab system may utilize a voucher validation system to facilitate gaming transactions. The validation system may be entirely integrated into a distributed pull-tab system or exist as a separate entity.

1. Payment by voucher printer as a method of redeeming unused game plays and/or winnings on a player device is only permissible when the device is linked to an approved validation system or distributed pull-tab system that allows validation of the printed voucher.

a. A distributed pull-tab system may allow voucher out only; vouchers shall not be inserted, scanned, or used in any way at the player device for redemption.

b. The validation system must process voucher redemption correctly according to the secure communication protocol implemented.

2. The algorithm or method used by the validation system or distributed pull-tab system to generate the voucher validation numbers must guarantee an insignificant percentage of repetitive validation numbers.

3. The validation system must retrieve the voucher information correctly based on the secure communication protocol implemented and store the voucher information in a database. The voucher record on the host system must contain, at a minimum, the following voucher information:

a. Validation number;

b. Date and time the player device printed the voucher;

c. Value of voucher in dollars and cents;

d. Status of voucher;

e. Date and time the voucher will expire;

f. Serial number of player device; and

g. Location name or site identifier;

4. The validation system or distributed pull-tab system must have the ability to identify the following occurrences and notify the cashier when the following conditions exist:

a. Voucher cannot be found on file;

b. Voucher has already been paid; or

c. Amount of voucher differs from amount on file (requirement may be met by display of voucher amount for confirmation by cashier during the redemption process).

5. If the connection between the validation system and the distributed pull-tab system fails, an alternate method or procedure of payment must be available and shall include the ability to identify duplicate vouchers and prevent fraud by redeeming vouchers that were previously issued by the player device.

6. The following reports related to vouchers shall be generated on demand:

a. Voucher Issuance Report shall be available from the validation system that shows all vouchers generated by an electronic game card device; and

b. Voucher Redemption Report shall detail individual vouchers, the sum of the vouchers paid by the validation terminal or point of sale by session, and include the following information:

(1) The date and time of the transaction;

(2) The dollar value of the transaction;

(3) Validation number;

(4) A transaction number; and

(5) Point-of-sale identification number or name.

7. The validation system database must be encrypted and password-protected and should possess a nonalterable user audit trail to prevent unauthorized access.

8. The normal operation of any device that holds voucher information shall not have any options or method that may compromise voucher information. Any device that holds voucher information in its memory shall not allow removal of the information unless it has first transferred that information to the ticketing database or other secured component or components of the validation system.

11VAC15-40-280. Point of sale; validation terminal.

A. A distributed pull-tab system may utilize a point-of-sale and/or validation terminal that is capable of facilitating the sale of the organization's pull tab outcomes or used for the redemption of credits from player accounts or vouchers. The point of sale may be entirely integrated into a distributed pull-tab system or exist as a separate entity.

B. Point-of-sale use is only permissible when the device is linked to an approved validation system or distributed pull-tab system.

C. If a distributed pull-tab system utilizes a point of sale, it shall be capable of printing a receipt for each sale, void, or redemption.

1. The receipt shall contain the following information:

a. Date and time of the transaction;

b. Dollar value of the transaction;

c. Validation number, if applicable;

d. Quantity of associated products, if applicable;

e. Transaction number;

f. Account number, if applicable; and

g. Point-of-sale identification number or name.

D. The following point-of-sale or validation terminal reports shall be generated on demand:

1. Sales Transaction History Report shall show all sales and voids by session and include the following information:

a. Date and time of the transaction;

b. Dollar value of the transaction;

c. Quantity of associated products;

d. Transaction number; and

e. Point of sale identification number or name;

2. Voucher Redemption Report shall detail individual voucher redemptions paid by the validation terminal or point of sale by session and include the following information:

a. Date and time of the transaction;

b. Dollar value of the transaction;

c. Validation number;

d. Transaction number; and

e. Point of sale identification number or name.

11VAC15-40-290. Location of equipment.

All equipment used to facilitate the distribution, play, or redemption of electronic pull-tab or instant bingo games must be physically located within the boundaries of the Commonwealth of Virginia. This includes but is not limited to the distributed pull-tab system, player devices, redemption terminals, and point-of-sale stations.

Article 2
Player Devices

11VAC15-40-300. Player device general requirements.

A. Each player device shall bear a seal approved by the commissioner and affixed by the department.

B. A player device shall not be capable of being used for the purposes of engaging in any game prohibited by the department.

C. In addition to a video monitor or touch screen, each player device may have one or more of the following: a bill acceptor, printer, and electromechanical buttons for activating the game and providing player input, including a means for the player to make selections and choices in games.

D. For each player device, there shall be located anywhere within the distributed pull-tab system, nonvolatile memory or its equivalent. The memory shall be maintained in a secure location for the purpose of storing and preserving a set of critical data that has been error checked in accordance with the critical memory requirements of this regulation.

E. A player device shall not have any switches, jumpers, wire posts, or other means of manipulation that could affect the operation or outcome of a game. The player device may not have any functions or parameters adjustable through any separate video display or input codes except for the adjustment of features that are wholly cosmetic.

F. A player device shall not have any of the following attributes: spinning or mechanical reels, pull handle, sounds other than an audio effect to simulate the opening of a paper pull-tab or instant bingo card, flashing lights, tower light, top box, coin tray, ticket acceptance, hopper, coin acceptor, enhanced animation, cabinet or payglass artwork, or any other attribute identified by the department.

G. A player device shall be robust enough to withstand forced illegal entry that would leave behind physical evidence of the attempted entry or such entry that causes an error code that is displayed and transmitted to the distributed pull-tab system. Any such entry attempt shall inhibit game play until cleared, and shall not affect the subsequent play or any other play, prize, or aspect of the game.

H. The number of player devices, other than those player devices that are handheld, present at any premise at which charitable gaming is conducted shall be limited to one device for every 50 permissible occupants under the maximum occupancy as determined pursuant to the Uniform Statewide Building Code. The department shall determine whether a player device is handheld.

11VAC15-40-310. Cabinet wiring.

A. Proof of UL or equivalent certification shall be required for all submitted electronic devices.

B. A player device shall be designed so that power and data cables into and out of the player device can be routed so that the cables are not accessible to the general public.

11VAC15-40-320. Player device identification.

A player device shall have a permanently affixed identification badge that cannot be removed without leaving evidence of tampering. This badge shall be affixed to the exterior of the player device and shall include the following information:

1. Manufacturer name;

2. A unique serial number;

3. The player device model number;

4. The date of manufacture; and

5. Any other information required by the department.

11VAC15-40-330. Doors; compartments.

A. If a player device possesses an external door that allows access to the interior of the machine the following rules shall apply:

1. Doors and their associated hinges shall be capable of withstanding determined illegal efforts to gain access to the inside of the player device and shall leave evidence of tampering if an illegal entry is made;

2. All external doors shall be locked and monitored by door access sensors that shall detect and report all external door openings by way of an audible alarm, on-screen display, or both;

3. The player device shall cease play when any external door is opened;

4. It shall not be possible to disable a door open sensor when the machine's door is closed without leaving evidence of tampering;

5. The sensor system shall register a door as being open when the door is moved from its fully closed and locked position; and

6. Door open conditions shall be recorded in an electronic log that includes a date/time stamp.

B. Player devices that contain control programs located within an accessible area shall have a separate internal locked logic compartment, that shall be keyed differently than the front door access lock. The logic compartment shall be a locked cabinet area with its own locked door, that houses critical electronic components that have the potential to significantly influence the operation of the player device. There may be more than one such logic area in a player device. Electronic component items that are required to be housed in one or more logic areas are:

1. CPUs and other electronic components involved in the operation and calculation or display of game play;

2. Communication controller electronics and components housing the communication program storage media or, the communication board for the on-line system may reside outside the player device; and

3. Logic compartment door open conditions shall be recorded in a log that includes a date/time stamp.

C. Player devices that do not contain a door shall have adequate security for any panels or entry points that allow access to the interior of the device.

11VAC15-40-340. Memory clear.

A. Following the initiation of a memory reset procedure utilizing a certified reset method, the program shall execute a routine that initializes the entire contents of memory to the default state. For player devices that allow for partial memory clears, the methodology in doing so must be accurate and the game application must validate the uncleared portions of memory. The player device display after a memory reset shall not be the top award.

B. It shall not be possible to change a configuration setting that causes an alteration or obstruction to the electronic accounting meters without a memory clear.

11VAC15-40-350. Critical memory.

A. Critical memory shall be used to store all data that is considered vital to the continued operation of the player device. Critical memory storage shall be maintained by a methodology that enables errors to be identified and corrected in most circumstances. This methodology may involve signatures, checksums, partial checksums, multiple copies, timestamps, and/or use of validity codes. This includes, but is not limited to:

1. All electronic meters required in 11VAC15-40-420 E;

2. Current unused credits;

3. Player device or game configuration data;

4. Recall of all wagers and other information necessary to fully reconstruct the game outcome associated with the last 10 plays;

5. Software state, which is the last state the player device software was in before interruption; and

6. Error conditions that may have occurred on the player device that may include:

a. Memory error or control program error;

b. Low memory battery, for batteries external to the memory itself or low power source;

c. Program error or authentication mismatch; and

d. Power reset.

B. Comprehensive checks of critical memory shall be made continually to test for possible corruption. In addition, all critical memory:

1. Shall have the ability to retain data for a minimum of 180 days after power is discontinued from the player device. If the method used is an off-chip battery source, it shall recharge itself to its full potential in a maximum of 24 hours. The shelf life shall be at least five years. Memory that uses an off-chip back-up power source to retain its contents when the main power is switched off shall have a detection system that will provide a method for software to interpret and act upon a low battery condition;

2. Shall only be cleared by a department certified memory clear method; and

3. Shall result in an error if the control program detects an unrecoverable memory error.

11VAC15-40-360. Program storage devices.

A. All program storage devices (writable/nonwritable), including Erasable Programmable Read Only Memory (EPROM), DVD, CD-ROM, compact flash, and any other type of program storage device shall be clearly marked with sufficient information to identify the software and revision level of the information stored in the devices.

B. Program storage devices shall meet the following requirements:

1. Program storage, including CD-ROM, shall meet the following rules:

a. The control program shall authenticate all critical files by employing a hashing algorithm that produces a "message digest" output of at least 128 bits at minimum, as certified by the recognized independent test laboratory and agreed upon by the department. Any message digest shall be stored on a read-only memory device within the player device. Any message digest that resides on any other medium shall be encrypted, using a public/private key algorithm with a minimum of a 512 bit key, or an equivalent encryption algorithm with similar security certified by the independent test laboratory and agreed upon by the department.

b. The player device shall authenticate all critical files against the stored message digests. In the event of a failed authentication, the player device should immediately enter an error condition with the appropriate indication such as an audible signal, on-screen display, or both. This error shall require operator intervention to clear. The player device shall display specific error information and shall not clear until the file authenticates properly and/or the player device's memory is cleared, the game is restarted, and all files authenticate correctly.

2. CD-ROM specific based program storage shall:

a. Not be a rewriteable disk; and

b. The "write session" shall be closed to prevent any further writing to the storage device.

C. Player devices where the control program is capable of being erased and reprogrammed without being removed from the player device, or other equipment or related peripheral devices shall meet the following requirements:

1. Reprogrammable program storage shall only write to alterable storage media containing data, files, and programs that are not critical to the basic operation of the game.

2. Notwithstanding the foregoing, data may be written to media containing critical data, files, and programs provided that:

a. A log of all information that is added, deleted, and modified be stored on the media;

b. The control program verifies the validity of all data, files, and programs that reside on the media using the methods required herein;

c. The player device's program contains appropriate security to prevent unauthorized modifications; and

d. The player device's program does not allow game play while the media containing the critical data, files, and programs is being modified.

D. The control program shall ensure the integrity of all critical program components during the execution of said components and the first time the files are loaded for use even if only partially loaded. Space that is not critical to machine security (e.g., video or sound) is not required to be validated, although the department recommends a method be in place for the files to be tested for corruption. If any of the video or sound files contain payout amounts or other information needed by the player, the files are to be considered critical.

11VAC15-40-370. Touch screens.

Any touch screen must meet the following rules:

1. A touch screen shall be accurate once calibrated;

2. A touch screen shall be able to be recalibrated; and

3. A touch screen shall have no hidden or undocumented buttons or touch points anywhere on the touch screen, except as provided for by the game rules that affect game play.

11VAC15-40-380. Bill acceptors.

A. A player device may have a mechanism that accepts U.S. currency and provides a method to enable the player device software to interpret and act appropriately upon a valid or invalid input.

B. An acceptance device shall be electronically based and be configured to ensure that it only accept valid bills and rejects all others in a highly accurate manner.

C. A bill input system shall be constructed in a manner that protects against vandalism, abuse, or fraudulent activity. In addition, a bill acceptance device shall only register credits when:

1. The bill has passed the point where it is accepted and stacked; and

2. The bill acceptor has sent the "irrevocably stacked" message to the machine.

D. A bill acceptor shall communicate to the player device using a bidirectional protocol.

E. A bill acceptor shall be designed to prevent the use of cheating methods such as stringing, the insertion of foreign

objects, and any other manipulation that may be deemed as a cheating technique.

F. If a bill acceptor is designed to be factory set only, it shall not be possible to access or conduct maintenance or adjustments to that bill acceptor in the field, other than:

1. The selection of bills and their limits;

2. Changing of certified EPROMs or downloading of certified software;

3. The method for adjustment of the tolerance level for accepting bills of varying quality should not be accessible from the exterior of the player device. Adjustments of the tolerance level should only be allowed with adequate levels of security in place. This can be accomplished through lock and key, physical switch settings, or other accepted methods approved on a case-by-case basis;

4. Maintenance, adjustment, and repair per approved factory procedures; and

5. Options that set the direction or orientation of bill acceptance.

G. A player device equipped with a bill acceptor shall have the capability of detecting and displaying an error condition for the following events:

1. Stacker full (it is recommended that an explicit "stacker full" error message not be utilized since this may cause a security issue);

2. Bill jams;

3. Bill acceptor door open. If a bill acceptor door is a machine door, a door open signal is sufficient;

4. Stacker door open; and

5. Stacker removed.

H. A player device equipped with a bill acceptor shall maintain sufficient electronic metering to be able to report the following:

1. Total monetary value of all bills accepted;

2. Total number of all bills accepted;

3. A breakdown of the bills accepted for each denomination; and

4. The value of the last five items accepted by the bill acceptor.

11VAC15-40-390. Payment by voucher printers.

A. If the player device has a printer that is used to issue payment to the player by issuing a printed voucher for any unused game plays and/or winnings, the player device shall meet the following rules:

1. The printer shall be located in a secure area of the player device, but shall not be located in the logic area or any cash storage area. The bill acceptor stacker or logic areas containing critical electronic components shall not be accessed when the printer paper is changed;

2. The player device, in which the printer is housed, is linked to a voucher validation system, which records the voucher information; and

3. Data printed on a voucher shall be provided to the voucher validation system that records the following information regarding each voucher printed:

a. Value of unused game plays and/or winnings in U.S. currency, in numerical form;

b. Time the voucher was printed;

c. Date the voucher was printed;

d. Location name or site identifier;

e. Serial number of player device;

f. Unique validation number or barcode; and

g. Expiration date and time.

B. If the player device is capable of printing a duplicate voucher, the duplicate voucher shall clearly state the word "DUPLICATE" on its face.

C. The printer shall use printer paper containing security features such as a watermark as approved by the department.

D. A printer shall have mechanisms to allow the player device to interpret and act upon the following conditions that must disable the game, and produce an error condition that requires attendant intervention to resume play:

1. Out of paper;

2. Printer jam or failure; and

3. Printer disconnect. The player device may detect this error condition when the game tries to print.

E. A player device that uses a voucher printer shall maintain a minimum of the last 25 transactions in critical memory. All voucher transactions shall be logged with a date and time stamp.

11VAC15-40-400. Payment by account.

A. Credit may be added to a player account via a cashier or point of sale station. Credit may also be added by any supporting player device through credits won or bills.

B. Money may be removed from a player account either through downloading of credits to the player device or by cashing out at a cashier's or point-of-sale station.

C. All monetary transactions between a supporting player device and the distributed pull-tab system must be secured by

means of a card insertion into a magnetic card reader and PIN entry or by other protected means.

Article 3
Game Requirements

11VAC15-40-410. Game play requirements.

A. A player receives an electronic game card in return for consideration. A player wins if the player's electronic game card contains a combination of symbols or numbers that was designated in advance of the game as a winning combination. There may be multiple winning combinations in each game. Electronic versions of instant bingo and pull-tabs, as authorized by the department, shall only utilize devices that allow players to play electronic game cards. A player device shall meet the following minimum requirements:

1. A player may purchase an opportunity to play an electronic game card by:

a. Insertion of U.S. currency (bills only);

b. Purchase made at a point of sale terminal; or

c. Withdrawing deposits available in a player account.

2. In addition to the available games, the rules of play shall be displayed on the player device's video screen. Rules of play shall include all winning combinations.

3. Any number of game themes may be selectable for play on any given player device. Only one of the game themes shall be playable at any given time.

4. A player device shall be clearly labeled so as to inform the public that no one under 18 years of age is allowed to play.

5. A player device shall not be capable of displaying any enticing animation while in an idle state. A player device may use simple display elements or screen savers to prevent monitor damage.

6. The results of the electronic game card shall be shown to the player using a video display. No rolling, flashing, or spinning animations are permitted. No rotating reels marked into horizontal segments by varying symbols are permitted. No entertaining sound or music is permitted other than an audio effect to simulate the opening of a paper pull-tab or instant bingo card. Any sounds present used to simulate the opening of a paper pull-tab must not be played at a level sufficient to disturb other players or patrons.

7. The player device shall have one or more buttons, electromechanical or touch screen, to facilitate the following functions:

a. Viewing of the game "help" screens;

b. Viewing of the game rules;

c. Initiating game play;

d. Cashout or logout; and

e. One or more buttons designated to reveal the pull-tab or instant bingo windows.

8. Following play on a player device, the result shall be clearly shown on the video display along with any prizes that may have been awarded. Prizes may be dispensed in the form of:

a. Voucher;

b. Added to the machine balance meter; or

c. Added to the player's account balance.

9. An available balance may be collected from the player device by the player pressing the "cashout" button or logging off of the player device at any time other than during:

a. A game being played;

b. While in an audit mode or screen;

c. Any door open;

d. Test mode;

e. A machine balance meter or win meter incrementation unless the entire amount is placed on the meter when the "cashout" button is pressed; or

f. An error condition.

10. The default player device display, upon entering game play mode, shall not be the top award.

B. A player device shall not have hardware or software that determines the outcome of any electronic game card, produce its own outcome, or affect the order of electronic game cards as dispensed from the distributed pull-tab system. The game outcome shall be determined by the distributed pull-tab system as outlined within these rules.

C. Game themes may not contain obscene or offensive graphics, animations, or references. All game themes will be subject to approval by the department.

D. Prior to approval for use, each player device must meet the following specifications with respect to its operation:

1. After accepting an allowable cash payment from the player, the player shall press a "play" button to initiate a game.

2. The player device shall not display in any manner, the number of electronic game cards of each finite category, or how many cards remain.

3. Awards of merchandise prizes in lieu of cash are prohibited.

4. The player must interact with the device to initiate a game and reveal a win or loss. This may involve a button press on the console or on the touch screen.

5. The electronic game card must be initially displayed with a cover and require player interaction to reveal the symbols and game outcome.

6. In no event may a player device simulate play of roulette, poker, keno, lotto or lottery, twenty-one, blackjack, or any other card game, or simulate play of any type of slot machine game, regardless of whether the machine has a payback feature or extra play awards. Card symbols such as ace, king, queen, or heart are acceptable, provided the aforementioned is abided by.

7. Games must not contain any elements of skill.

E. Each player device must meet the following specifications with respect to its metering system:

1. A player device shall contain electronic metering whereby meters record and display on the video screen the following information at a minimum:

a. Total cash in for the bill acceptor if equipped with a bill acceptor;

b. Total cash played;

c. Total cash won;

d. Total cash removed from player device;

e. Total count of electronic game cards played; and

f. Total count of electronic game cards won.

2. An electronic meter shall be capable of maintaining correct totals and be of no less than 10 digits in length.

3. A player device shall not be capable of displaying the number of electronic game cards that remain in the game set or the number of winners or losers that have been drawn or still remain in the game set while the game set is still being played.

4. An electronic meter shall not be capable of being automatically reset or cleared, whether due to an error in any aspect of the meter's or a game's operation or otherwise.

5. Currency meters shall be maintained in dollars and cents.

Part V
Administrative Process

11VAC15-40-420. Procedural rules for the conduct of fact-finding conferences and hearings.

A. Fact-finding conference; notification, appearance, and conduct.

1. Unless automatic revocation or immediate suspension is required by law, no permit to conduct charitable gaming or to sell charitable gaming supplies shall be denied, suspended, or revoked except after review and approval of such proposed denial, suspension, or revocation action by the board, and upon notice stating the basis for such proposed action and the time and place for a fact-finding conference as set forth in § 2.2-4019 of the Administrative Process Act.

2. If a basis exists for a refusal to renew, suspend, or a revoke a permit, the department shall notify by certified mail or by hand delivery the interested persons at the address of record maintained by the department.

3. Notification shall include the basis for the proposed action and afford interested persons the opportunity to present written and oral information to the department that may have a bearing on the proposed action at a fact-finding conference. If there is no withdrawal, a fact-finding conference shall be scheduled at the earliest mutually agreeable date, but no later than 60 days from the date of the notification. Organizations or suppliers who wish to waive their right to a conference shall notify the department at least 14 days before the scheduled conference.

4. If, after consideration of evidence presented during an informal fact-finding conference, a basis for action still exists, the interested persons shall be notified in writing within 60 days of the fact-finding conference via certified or hand-delivered mail of the decision and the right to a formal hearing. Parties to the conference may agree to extend the report deadline if more time is needed to consider relevant evidence.

B. Hearing; notification, appearance, and conduct.

1. If, after a fact-finding conference, a sufficient basis still exists to deny, suspend, or revoke a permit, interested persons shall be notified by certified or hand-delivered mail of the proposed action and of the opportunity for a hearing on the proposed action. If an organization or supplier desires to request a hearing, it shall notify the department within 14 days of receipt of a report on the conference. Parties may enter into a consent agreement to settle the issues at any time prior to, or subsequent to, an informal fact-finding conference.

2. If an interested party or representative fails to appear at a hearing, the hearing officer may proceed in his absence and make a recommendation.

3. Oral and written arguments may be submitted to and limited by the hearing officer. Oral arguments shall be recorded in an appropriate manner.

C. Hearing location. Hearings before a hearing officer shall be held, insofar as practicable, in the county or city in which

the organization or supplier is located. If the parties agree, hearing officers may conduct hearings at locations convenient to the greatest number of persons or by telephone conference, video conference, or similar technology, in order to expedite the hearing process.

D. Hearing decisions.

1. Recommendations of the hearing officer shall be a part of the record and shall include a written statement of the hearing officer's findings of fact and recommendations as well as the reasons or basis for the recommendations. Recommendations shall be based upon all the material issues of fact, law, or discretion presented on the record.

2. The department shall review the recommendation of the hearing officer and render a decision on the recommendation within 30 days of receipt. The decision shall cite the appropriate rule, relief, or denial thereof as to each issue.

E. Agency representation. The commissioner's designee may represent the department in an informal conference or at a hearing.

11VAC15-40-430. Reporting violations.

A. Unless otherwise required by law, the identity of any individual who provides information to the department or its agents regarding alleged violations shall be held in strict confidence.

B. Any officer, director, or game manager of a qualified organization or any officer or director of a supplier shall immediately report to the department any information pertaining to the suspected misappropriation or theft of funds or any other violations of charitable gaming statutes or these regulations.

C. Failure to report the information required by subsection B of this section may result in the denial, suspension, or revocation of a permit.

D. Any officer, director, or game manager of a qualified organization involved in the management, operation, or conduct of charitable gaming shall immediately notify the department upon conviction of a felony or a crime involving fraud, theft, or financial crimes.

E. Any officer, director, partner, or owner of a supplier shall immediately notify the department upon conviction or plea of nolo contendere to a felony or a crime involving gambling or an action against any license or certificate held by the supplier in any state in the United States.

F. Failure to report information required by subsection D or E of this section by any officer, director, or game manager of a qualified organization or by any supplier may result in the denial, suspension, or revocation of a permit.

G. Any officer, director, or game manager of a qualified organization involved in charitable gaming shall immediately report to the department any change the Internal Revenue Service makes in the tax status of the organization, or if the organization is a chapter of a national organization covered by a group tax exempt determination, the tax status of the national organization.

H. All organizations regulated by the department shall display prominently a poster advising the public of a phone number where complaints relating to charitable gaming may be made. Such posters shall be provided by the department to organizations at no charge.

NOTICE: The following forms used in administering the regulation were filed by the agency. The forms are not being published; however, online users of this issue of the Virginia Register of Regulations may click on the name to access a form. The forms are also available from the agency contact or may be viewed at the Office of the Registrar of Regulations, General Assembly Building, 2nd Floor, Richmond, Virginia 23219.

FORMS (11VAC15-40)

GAME MANAGEMENT FORMS

Bingo Session Reconciliation Summary, Form 103 (rev. 1/11).

Admission Sales Reconciliation - Paper, Form 104-A (rev. 1/11).

Floor Sales Reconciliation - Paper, Form 104-B (rev. 1/11).

Decision Bingo Reconciliation, Form 104-C (rev. 1/11).

Raffle/Treasure Chest Sales Reconciliation - Bingo Session, Form 104-D (rev. 1/11).

Instant Bingo/Seal Cards/Pull-Tabs Reconciliation, Form 105 (rev. 1/11) .

Storeroom Inventory Issue - Paper, Form 106-A (rev. 7/08).

Storeroom Inventory Issue - Instant Bingo/Seal Cards/Pull-Tabs, Form 106-B (rev. 7/08).

List of Volunteer Workers, Form 107 (rev. 7/08).

Prize Receipt, Form 108 (rev. 7/08).

Storeroom Inventory - Paper, Form 109-A (rev. 1/11).

Storeroom Inventory - Instant Bingo/Seal Cards/Pull-Tabs, Form 109-B (rev. 1/11) .

ORGANIZATION LICENSING FORMS

Charitable Gaming Permit Application - New Applicants Only, Form 201 - N (rev. 1/11).

Charitable Gaming Permit Application - Renewal Applicants Only, Form 201 - R (rev. 1/11).

Permit Amendment (rev. 1/11).

Gaming Personnel Information Update (rev. 7/08).

Report of Game Termination (rev. 7/08).

SUPPLIER LICENSING FORMS

Charitable Gaming Supplier Permit Application, Form 301 (rev. 1/11).

Annual Supplier Sales and Transaction Report, Form 302 (rev. 7/08).

BINGO MANAGER AND BINGO CALLER REGISTRATION FORMS

Charitable Gaming Bingo Caller Certificate of Registration Application, Form 401 (rev. 1/11).

Charitable Gaming Bingo Manager Certificate of Registration Application, Form 402 (rev. 1/11).

Amendment to Certificate of Registration – Registered Bingo Callers and Bingo Managers (rev. 1/11).

Personal Information Update – Registered Bingo Callers and Registered Bingo Managers, Form 404 (rev. 7/07).

Bona Fide Member Verification, Form 405 (rev. 5/11).

DOCUMENTS INCORPORATED BY REFERENCE (11VAC15-40)

IRS Publication 3079, Tax-Exempt Organizations and Gaming (rev. 6/10).

Security Requirements for Cryptographic Modules, Federal Information Processing Standard, FIPS Pub 140-2 (rev. 12/02).

VA.R. Doc. No. R11-2560; Filed October 19, 2011, 2:33 p.m.

TITLE 12. HEALTH

STATE BOARD OF HEALTH

Final Regulation

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

Title of Regulation: **12VAC5-590. Waterworks Regulations (amending 12VAC5-590-10, 12VAC5-590-340, 12VAC5-590-350, 12VAC5-590-370, 12VAC5-590-380, 12VAC5-590-410, 12VAC5-590-420, 12VAC5-590-440, 12VAC5-590-460, 12VAC5-590-500, 12VAC5-590-530, 12VAC5-590-540, 12VAC5-590-545, 12VAC5-590-550; adding 12VAC5-590-379, 12VAC5-590-421, 12VAC5-590-425).**

Statutory Authority: §§ 32.1-12 and 32.1-170 of the Code of Virginia.

Effective Date: December 7, 2011.

Agency Contact: Robert A. K. Payne, Compliance Manager, Department of Health, 109 Governor Street, Richmond, VA 23219, telephone (804) 864-7498, or email rob.payne@vdh.virginia.gov.

Summary:

The amendments provide for (i) periodic sanitary surveys of groundwater source waterworks that require the evaluation of eight critical elements and the identification of significant deficiencies; (ii) source water monitoring to test for the presence of E. coli; (iii) required corrective actions for any waterworks with a significant deficiency or source water E. coli contamination; and (iv) compliance monitoring to ensure that treatment technology installed to treat drinking water achieves at least 99.99% inactivation or removal of viruses.

Part I
General Framework for Waterworks Regulations

Article 1
Definitions

12VAC5-590-10. Definitions.

As used in this chapter, the following words and terms shall have meanings respectively set forth unless the context clearly requires a different meaning:

"Action level" means the concentration of lead or copper in water specified in 12VAC5-590-385, which determines, in some cases, the treatment requirements contained in 12VAC5-590-405 that an owner is required to complete.

"Air gap separation" means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying pure water to a tank, plumbing fixture, or other device and the rim of the receptacle.

"Annual daily water demand" means the average rate of daily water usage over at least the most recent three-year period.

"Applied water" means water that is ready for filtration.

"Approved" means material, equipment, workmanship, process or method that has been accepted by the commissioner as suitable for the proposed use.

"Auxiliary water system" means any water system on or available to the premises other than the waterworks. These

auxiliary waters may include water from a source such as wells, lakes, or streams; or process fluids; or used water. They may be polluted or contaminated or objectionable, or constitute an unapproved water source or system over which the water purveyor does not have control.

"Backflow" means the flow of water or other liquids, mixtures, or substances into the distribution piping of a waterworks from any source or sources other than its intended source.

"Backflow prevention device" means any approved device, method, or type of construction intended to prevent backflow into a waterworks.

"Bag filters" means pressure-driven separation devices that remove particulate matter larger than one micrometer using an engineered porous filtration media. They are typically constructed of a nonrigid, fabric filtration media housed in a pressure vessel in which the direction of flow is from the inside of the bag to outside.

"Bank filtration" means a water treatment process that uses a well to recover surface water that has naturally infiltrated into groundwater through a river bed or bank(s). Infiltration is typically enhanced by the hydraulic gradient imposed by a nearby pumping water supply or other well(s).

"Best available technology (BAT)" means the best technology, treatment techniques, or other means which the commissioner finds, after examination for efficacy under field conditions and not solely under laboratory conditions and in conformance with applicable EPA regulations, are available (taking cost into consideration).

"Board" means the State Board of Health.

"Breakpoint chlorination" means the addition of chlorine to water until the chlorine demand has been satisfied and further additions result in a residual that is directly proportional to the amount added.

"Cartridge filters" means pressure-driven separation devices that remove particulate matter larger than one micrometer using an engineered porous filtration media. They are typically constructed as rigid or semi-rigid, self-supporting filter elements housed in pressure vessels in which flow is from the outside of the cartridge to the inside.

"Chlorine" means dry chlorine.

"Chlorine gas" means dry chlorine in the gaseous state.

"Chlorine solution (chlorine water)" means a solution of chlorine in water.

"Coagulation" means a process using coagulant chemicals and mixing by which colloidal and suspended materials are destabilized and agglomerated into floc.

"Coliform bacteria group" means a group of bacteria predominantly inhabiting the intestines of man or animal but also occasionally found elsewhere. It includes all aerobic and facultative anaerobic, gram-negative, non-sporeforming bacilli that ferment lactose with production of gas. Also included are all bacteria that produce a dark, purplish-green colony with metallic sheen by the membrane filter technique used for coliform identification.

"Combined distribution system" means the interconnected distribution system consisting of the distribution systems of wholesale waterworks and of the consecutive waterworks that receive finished water.

"Commissioner" means the State Health Commissioner.

"Community waterworks" means a waterworks which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

"Compliance cycle" means the nine-year calendar year cycle during which a waterworks shall monitor. Each compliance cycle consists of three three-year compliance periods. The first calendar year cycle begins January 1, 1993, and ends December 31, 2001; the second begins January 1, 2002, and ends December 31, 2010; the third begins January 1, 2011, and ends December 31, 2019.

"Compliance period" means a three-year calendar year period within a compliance cycle. Each compliance cycle has three three-year compliance periods. Within the first compliance cycle, the first compliance period runs from January 1, 1993, to December 31, 1995; the second from January 1, 1996, to December 31, 1998; the third from January 1, 1999, to December 31, 2001.

"Comprehensive performance evaluation" or "(CPE)" means a thorough review and analysis of a treatment plant's performance-based capabilities and associated administrative, operational and maintenance practices. It is conducted to identify factors that may be adversely impacting a plant's capability to achieve compliance and emphasizes approaches that can be implemented without significant capital improvements. For purposes of compliance with 12VAC5-590-530 C 1 b (2), the comprehensive performance evaluation shall consist of at least the following components: assessment of plant performance; evaluation of major unit processes; identification and prioritization of performance limiting factors; assessment of the applicability of comprehensive technical assistance; and preparation of a CPE report.

"Confluent growth" means a continuous bacterial growth covering the entire filtration area of a membrane filter, or a portion thereof, in which bacterial colonies are not discrete.

"Consecutive waterworks" means a waterworks which has no water production or source facility of its own and which obtains all of its water from another permitted waterworks or receives some or all of its finished water from one or more wholesale waterworks. Delivery may be through a direct

connection or through the distribution system of one or more consecutive waterworks.

"Consumer" means any person who drinks water from a waterworks.

"Consumer's water system" means any water system located on the consumer's premises, supplied by or in any manner connected to a waterworks.

"Contaminant" means any objectionable or hazardous physical, chemical, biological, or radiological substance or matter in water.

"Conventional filtration treatment" means a series of processes including coagulation, flocculation, sedimentation, and filtration resulting in substantial particulate removal.

"Corrosion inhibitor" means a substance capable of reducing the corrosivity of water toward metal plumbing materials, especially lead and copper, by forming a protective film on the interior surface of those materials.

"Cross connection" means any connection or structural arrangement, direct or indirect, to the waterworks whereby backflow can occur.

"CT" or "CT calc" means the product of "residual disinfectant concentration" (C) in mg/L determined before or at the first customer, and the corresponding "disinfectant contact time" (T) in minutes, i.e., "C" x "T".

"Daily fluid intake" means the daily intake of water for drinking and culinary use and is defined as two liters.

"Dechlorination" means the partial or complete reduction of residual chlorine in water by any chemical or physical process at a waterworks with a treatment facility.

"Degree of hazard" means the level of health hazard, as derived from an evaluation of the potential risk to health and the adverse effect upon the waterworks.

"Diatomaceous earth filtration" means a process resulting in substantial particulate removal in which (i) a precoat cake of diatomaceous earth filter media is deposited on a support membrane (septum), and (ii) while the water is filtered by passing through the cake on the septum, additional filter media known as body feed is continuously added to the feed water to maintain the permeability of the filter cake.

"Direct filtration" means a series of processes including coagulation and filtration but excluding sedimentation resulting in substantial particulate removal.

"Disinfectant" means any oxidant (including chlorine) that is added to water in any part of the treatment or distribution process for the purpose of killing or deactivating pathogenic organisms.

"Disinfectant contact time ("T" in CT calculations)" means the time in minutes that it takes for water to move from the point of disinfectant application to the point where residual disinfectant concentration ("C") is measured.

"Disinfection" means a process that inactivates pathogenic organisms in water by chemical oxidants or equivalent agents.

"Disinfection profile" means a summary of Giardia lamblia or virus inactivation through the treatment plant.

"Distribution main" means a water main whose primary purpose is to provide treated water to service connections.

"District Engineer" means the employee assigned by the Commonwealth of Virginia, Department of Health, Office of Drinking Water to manage its regulatory activities in a geographical area of the state consisting of a state planning district or subunit of a state planning district.

"Domestic or other nondistribution system plumbing problem" means a coliform contamination problem in a waterworks with more than one service connection that is limited to the specific service connection from which the coliform positive sample was taken.

"Domestic use or usage" means normal family or household use, including drinking, laundering, bathing, cooking, heating, cleaning and flushing toilets (see Article 2 (§ 32.1-167 et seq.) of Chapter 6 of Title 32.1 of the Code of Virginia).

"Double gate-double check valve assembly" means an approved assembly composed of two single independently acting check valves including tightly closing shutoff valves located at each end of the assembly and petcocks and test gauges for testing the watertightness of each check valve.

"Dual sample set" means a set of two samples collected at the same time and same location, with one sample analyzed for TTHM and the other sample analyzed for HAA5. Dual sample sets are collected for the purposes of conducting an initial distribution system evaluation (IDSE) under 12VAC5-590-370 B 3 e (2) and determining compliance with the TTHM and HAA5 MCLs under 12VAC5-590-370 B 3 e (3).

"Effective corrosion inhibitor residual" means, for the purpose of 12VAC5-590-405 A 1 only, a concentration sufficient to form a passivating film on the interior walls of a pipe.

"Enhanced coagulation" means the addition of sufficient coagulant for improved removal of disinfection byproduct precursors by conventional filtration treatment.

"Enhanced softening" means the improved removal of disinfection byproduct precursors by precipitative softening.

"Entry point" means the place where water from the source after application of any treatment is delivered to the distribution system.

"Equivalent residential connection" means a volume of water used equal to a residential connection which is 400 gallons per day unless supportive data indicates otherwise.

"Exception" means an approved deviation from a "shall" criteria contained in Part III (12VAC5-590-640 et seq.) of this chapter.

"Exemption" means a conditional waiver of a specific PMCL or treatment technique requirement which is granted to a specific waterworks for a limited period of time.

"Filter profile" means a graphical representation of individual filter performance, based on continuous turbidity measurements or total particle counts versus time for an entire filter run, from startup to backwash inclusively, that includes an assessment of filter performance while another filter is being backwashed.

"Filtration" means a process for removing particulate matter from water by passage through porous media.

"Finished water" means water that is introduced into the distribution system of a waterworks and is intended for distribution and consumption without further treatment, except as treatment necessary to maintain water quality in the distribution system (e.g., booster disinfection, addition of corrosion control chemicals).

"First draw sample" means a one-liter sample of tap water, collected in accordance with 12VAC5-590-375 B 2, that has been standing in plumbing pipes at least six hours and is collected without flushing the tap.

"Flocculation" means a process to enhance agglomeration or collection of smaller floc particles into larger, more easily settleable particles through gentle stirring by hydraulic or mechanical means.

"Flowing stream" means a course of running water flowing in a definite channel.

"Free available chlorine" means that portion of the total residual chlorine remaining in water at the end of a specified contact period which will react chemically and biologically as hypochlorous acid or hypochlorite ion.

"GAC10" means granular activated carbon filter beds with an empty-bed contact time of 10 minutes based on average daily flow and a carbon reactivation frequency of every 180 days, except that the reactivation frequency for GAC10 used as a best available technology for compliance with 12VAC5-590-410 C 2 b (1) (b) shall be 120 days.

"GAC20" means granular activated carbon filter beds with an empty-bed contact time of 20 minutes based on average daily flow and a carbon reactivation frequency of every 240 days.

"Governmental entity" means the Commonwealth, a town, city, county, service authority, sanitary district or any other governmental body established under the Code of Virginia, including departments, divisions, boards or commissions.

"Gross alpha particle activity" means the total radioactivity due to alpha particle emission as inferred from measurements on a dry sample.

"Gross beta particle activity" means the total radioactivity due to beta particle emission as inferred from measurements on a dry sample.

"Groundwater" means all water obtained from sources not classified as surface water (or surface water sources).

"Groundwater system" means any waterworks that uses groundwater as its source of supply; however, a waterworks that combines all its groundwater with surface water or with groundwater under the direct influence of surface water prior to treatment is not a groundwater system. Groundwater systems include consecutive waterworks that receive finished groundwater from a wholesale waterworks.

"Groundwater under the direct influence of surface water" or "GUDI" means any water beneath the surface of the ground with significant occurrence of insects or other macroorganisms, algae, or large-diameter pathogens such as Giardia lamblia, or Cryptosporidium. It also means significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH that closely correlate to climatological or surface water conditions. The commissioner in accordance with 12VAC5-590-430 will determine direct influence of surface water.

"Haloacetic acids (five)" or "(HAA5)" means the sum of the concentrations in milligrams per liter of the haloacetic acid compounds (monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid), rounded to two significant figures after addition.

"Halogen" means one of the chemical elements chlorine, bromine, fluorine, astatine or iodine.

"Health hazard" means any condition, device, or practice in a waterworks or its operation that creates, or may create, a danger to the health and well-being of the water consumer.

"Health regulations" means regulations which include all primary maximum contaminant levels, treatment technique requirements, and all operational regulations, the violation of which would jeopardize the public health.

"Hypochlorite" means a solution of water and some form of chlorine, usually sodium hypochlorite.

"Initial compliance period" means for all regulated contaminants, the initial compliance period is the first full three-year compliance period beginning at least 18 months after promulgation with the exception of waterworks with 150 or more service connections for contaminants listed at Table 2.3, VOC 19-21; Table 2.3, SOC 19-33; and antimony,

beryllium, cyanide (as free cyanide), nickel, and thallium which shall begin January 1993.

"Interchangeable connection" means an arrangement or device that will allow alternate but not simultaneous use of two sources of water.

~~"Karstian~~ "Karst geology" means an area predominantly underlain by limestone, dolomite, or gypsum and characterized by rapid underground drainage. Such areas often feature sinkholes, caverns, and sinking or disappearing creeks. In Virginia, this generally includes all that area west of the Blue Ridge and, in Southwest Virginia, east of the Cumberland Plateau.

"Lake/reservoir" means a natural or man-made basin or hollow on the Earth's surface in which water collects or is stored that may or may not have a current or single direction of flow.

"Large waterworks" means, for the purposes of 12VAC5-590-375, 12VAC5-590-405, 12VAC5-590-530 D, and 12VAC5-590-550 D only, a waterworks that serves more than 50,000 persons.

"Lead free" means the following:

1. When used with respect to solders and flux refers to solders and flux containing not more than 0.2% lead;

2. When used with respect to pipes and pipe fittings refers to pipes and pipe fittings containing not more than 8.0% lead;

3. When used with respect to plumbing fittings and fixtures intended by the plumbing manufacturer to dispense water for human ingestion refers to fittings and fixtures that are in compliance with standards established in accordance with 42 USC § 300g-6(e).

"Lead service line" means a service line made of lead which connects the water main to the building inlet and any lead pigtail, gooseneck or other fitting that is connected to such lead line.

"Legionella" means a genus of bacteria, some species of which have caused a type of pneumonia called Legionnaires Disease.

"Liquid chlorine" means a liquefied, compressed chlorine gas as shipped in commerce.

"Locational running annual average" or "LRAA" means the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

"Log inactivation (log removal)" means that a 99% reduction is a 2-log inactivation; a 99.9% reduction is a 3-log inactivation; a 99.99% reduction is a 4-log inactivation.

"Man-made beta particle and photon emitters" means all radionuclides emitting beta particles and/or photons listed in the most current edition of "Maximum Permissible Body Burdens and Maximum Permissible Concentration of Radionuclides in Air or Water for Occupational Exposure," National Bureau of Standards Handbook 69, except the daughter products of thorium-232, uranium-235 and uranium-238.

"Maximum daily water demand" means the rate of water usage during the day of maximum water use.

"Maximum contaminant level (MCL)" means the maximum permissible level of a contaminant in pure water which is delivered to any user of a waterworks. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. MCLs may be either "primary" (PMCL), meaning based on health considerations or "secondary" (SMCL) meaning based on aesthetic considerations.

"Maximum residual disinfectant level (MRDL)" means a level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects. For chlorine and chloramines, a waterworks is in compliance with the MRDL when the running annual average of monthly averages of samples taken in the distribution system, computed quarterly, is less than or equal to the MRDL. For chlorine dioxide, a waterworks is in compliance with the MRDL when daily samples are taken at the entrance to the distribution system and no two consecutive daily samples exceed the MRDL. MRDLs are enforceable in the same manner as maximum contaminant levels. There is convincing evidence that addition of a disinfectant is necessary for control of waterborne microbial contaminants. Notwithstanding the MRDLs listed in Table 2.12, operators may increase residual disinfectant levels of chlorine or chloramines (but not chlorine dioxide) in the distribution system to a level and for a time necessary to protect public health to address specific microbiological contamination problems caused by circumstances such as distribution line breaks, storm runoff events, source water contamination, or cross-connections.

"Maximum residual disinfectant level goal (MRDLG)" means the maximum level of a disinfectant added for water treatment at which no known or anticipated adverse effect on the health of persons would occur, and which allows an adequate margin of safety. MRDLGs are nonenforceable health goals and do not reflect the benefit of the addition of the chemical for control of waterborne microbial contaminants.

"Maximum total trihalomethane potential (MTP)" means the maximum concentration of total trihalomethanes produced in a given water containing a disinfectant residual after seven days at a temperature of 25°C or above.

"Medium-size waterworks" means, for the purpose of 12VAC5-590-375, 12VAC5-590-405, 12VAC5-590-530, and 12VAC5-590-550 D only, a waterworks that serves greater than 3,300 and less than or equal to 50,000 persons.

"Membrane filtration" means a pressure or vacuum-driven separation process in which particulate matter larger than one micrometer is rejected by an engineered barrier, primarily through a size exclusion mechanism, and that has a measurable removal efficiency of a target organism that can be verified through the application of a direct integrity test. This definition includes the common membrane technologies of microfiltration, ultrafiltration, nanofiltration, and reverse osmosis.

"Method detection limit" means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.

"Most probable number (MPN)" means that number of organisms per unit volume that, in accordance with statistical theory, would be more likely than any other number to yield the observed test result or that would yield the observed test result with the greatest frequency, expressed as density of organisms per 100 milliliters. Results are computed from the number of positive findings of coliform-group organisms resulting from multiple-portion decimal-dilution plantings.

"Noncommunity waterworks" means a waterworks that is not a community waterworks, but operates at least 60 days out of the year.

"Nonpotable water" means water not classified as pure water.

"Nontransient noncommunity waterworks (NTNC)" means a waterworks that is not a community waterworks and that regularly serves at least 25 of the same persons over six months out of the year.

"Office" or "ODW" means the Commonwealth of Virginia, Department of Health, Office of Drinking Water.

"One hundred year flood level" means the flood elevation which will, over a long period of time, be equaled or exceeded on the average once every 100 years.

"Operator" means any individual employed or appointed by any owner, and who is designated by such owner to be the person in responsible charge, such as a supervisor, a shift operator, or a substitute in charge, and whose duties include testing or evaluation to control waterworks operations. Not included in this definition are superintendents or directors of public works, city engineers, or other municipal or industrial officials whose duties do not include the actual operation or direct supervision of waterworks.

"Optimal corrosion control treatment" means the corrosion control treatment that minimizes the lead and copper concentrations at users' taps while ensuring that the treatment does not cause the waterworks to violate any other section of this chapter.

"Owner" or "water purveyor" means an individual, group of individuals, partnership, firm, association, institution, corporation, governmental entity, or the federal government which supplies or proposes to supply water to any person within this state from or by means of any waterworks (see Article 2 (§ 32.1-167 et seq.) of Chapter 6 of Title 32.1 of the Code of Virginia).

"Picocurie (pCi)" means that quantity of radioactive material producing 2.22 nuclear transformations per minute.

"Plant intake" means the works or structures at the head of a conduit through which water is diverted from a source (e.g., river or lake) into the treatment plant.

"Point of disinfectant application" means the point where the disinfectant is applied and water downstream of that point is not subject to recontamination by surface water runoff.

"Point-of-entry treatment device (POE)" means a treatment device applied to the water entering a house or building for the purpose of reducing contaminants in the water distributed throughout the house or building.

"Point-of-use treatment device (POU)" means a treatment device applied to a single tap for the purpose of reducing contaminants in the water at that one tap.

"Pollution" means the presence of any foreign substance (chemical, physical, radiological, or biological) in water that tends to degrade its quality so as to constitute an unnecessary risk or impair the usefulness of the water.

"Pollution hazard" means a condition through which an aesthetically objectionable or degrading material may enter the waterworks or a consumer's water system.

"Post-chlorination" means the application of chlorine to water subsequent to treatment.

"Potable water" – see "Pure water."

"Practical quantitation level (PQL)" means the lowest level achievable by good laboratories within specified limits during routine laboratory operating conditions.

"Prechlorination" means the application of chlorine to water prior to filtration.

"Presedimentation" means a preliminary treatment process used to remove gravel, sand and other particulate material from the source water through settling before the water enters the primary clarification and filtration processes in a treatment plant.

"Process fluids" means any fluid or solution which may be chemically, biologically, or otherwise contaminated or polluted which would constitute a health, pollutional, or system hazard if introduced into the waterworks. This includes, but is not limited to:

1. Polluted or contaminated water;

2. Process waters;

3. Used waters, originating from the waterworks which may have deteriorated in sanitary quality;

4. Cooling waters;

5. Contaminated natural waters taken from wells, lakes, streams, or irrigation systems;

6. Chemicals in solution or suspension; and,

7. Oils, gases, acids, alkalis, and other liquid and gaseous fluid used in industrial or other processes, or for fire fighting purposes.

"Pure water" ~~or "potable water"~~ means water fit for human consumption and domestic use which is sanitary and normally free of minerals, organic substances, and toxic agents in excess of reasonable amounts for domestic usage in the area served and normally adequate in quantity and quality for the minimum health requirements of the persons served (see Article 2 (§ 32.1-167 et seq.) of Chapter 6 of Title 32.1 of the Code of Virginia).

"Raw water main" means a water main which conveys untreated water from a source to a treatment facility.

"Reduced pressure principle backflow prevention device (RPZ device)" means a device containing a minimum of two independently acting check valves together with an automatically operated pressure differential relief valve located between the two check valves. During normal flow and at the cessation of normal flow, the pressure between these two checks shall be less than the supply pressure. In case of leakage of either check valve, the differential relief valve, by discharging to the atmosphere, shall operate to maintain the pressure between the check valves at less than the supply pressure. The unit shall include tightly closing shut-off valves located at each end of the device, and each device shall be fitted with properly located test cocks. These devices shall be of the approved type.

"REM" means the unit of dose equivalent from ionizing radiation to the total body or any internal organ or organ system. A "millirem" (MREM) is 1/1000 of a REM.

"Repeat compliance period" means any subsequent compliance period after the initial compliance period.

"Residual disinfectant concentration ("C" in CT Calculations)" means the concentration of disinfectant measured in mg/L in a representative sample of water.

"Responsible charge" means designation by the owner of any individual to have duty and authority to operate or modify the operation of waterworks processes.

"Sanitary facilities" means piping and fixtures, such as sinks, lavatories, showers, and toilets, supplied with potable water and drained by wastewater piping.

"Sanitary survey" means an ~~investigation of any condition that may affect public health~~ evaluation conducted by ODW of a waterworks' water supply, facilities, equipment, operation, maintenance, monitoring records, and overall management of a waterworks to ensure the provision of pure water.

"Secondary water source" means any approved water source, other than a waterworks' primary source, connected to or available to that waterworks for emergency or other nonregular use.

"Sedimentation" means a process for removal of solids before filtration by gravity or separation.

"Service connection" means the point of delivery of water to a customer's building service line as follows:

1. If a meter is installed, the service connection is the downstream side of the meter;

2. If a meter is not installed, the service connection is the point of connection to the waterworks;

3. When the water purveyor is also the building owner, the service connection is the entry point to the building.

"Service line sample" means a one-liter sample of water, collected in accordance with 12VAC5-590-375 B 2 c, that has been standing for at least six hours in a service line.

"Sewer" means any pipe or conduit used to convey sewage or industrial waste streams.

"Significant deficiency" means any defect in a waterworks' design, operation, maintenance, or administration, as well as the failure or malfunction of any waterworks component, that may cause, or has the potential to cause, an unacceptable risk to health or could affect the reliable delivery of pure water to consumers.

"Single family structure" means, for the purpose of 12VAC5-590-375 B only, a building constructed as a single-family residence that is currently used as either a residence or a place of business.

"Slow sand filtration" means a process involving passage of raw water through a bed of sand at low velocity (generally less than 0.4 m/h) resulting in substantial particulate removal by physical and biological mechanisms.

"Small waterworks" means, for the purpose of 12VAC5-590-375, 12VAC5-590-405, 12VAC5-590-530 D and

12VAC5-590-550 D only, a waterworks that serves 3,300 persons or fewer.

"Standard sample" means that portion of finished drinking water that is examined for the presence of coliform bacteria.

"Surface water" means all water open to the atmosphere and subject to surface runoff.

"SUVA" means specific ultraviolet absorption at 254 nanometers (nm), an indicator of the humic content of water. It is a calculated parameter obtained by dividing a sample's ultraviolet absorption at a wavelength of 254 nm (UV_{254}) (in m-1) by its concentration of dissolved organic carbon (DOC) (in mg/L).

"Synthetic organic chemicals (SOC)" means one of the family of organic man-made compounds generally utilized for agriculture or industrial purposes.

"System hazard" means a condition posing an actual, or threat of, damage to the physical properties of the waterworks or a consumer's water system.

"Terminal reservoir" means an impoundment providing end storage of water prior to treatment.

"Too numerous to count" means that the total number of bacterial colonies exceeds 200 on a 47-mm diameter membrane filter used for coliform detection.

"Total effective storage volume" means the volume available to store water in distribution reservoirs measured as the difference between the reservoir's overflow elevation and the minimum storage elevation. The minimum storage elevation is that elevation of water in the reservoir that can provide a minimum pressure of 20 psi at a flow as determined in 12VAC5-590-690 C to the highest elevation served within that reservoir's service area under systemwide maximum daily water demand.

"Total organic carbon (TOC)" means total organic carbon in mg/L measured using heat, oxygen, ultraviolet irradiation, chemical oxidants, or combinations of these oxidants that convert organic carbon to carbon dioxide, rounded to two significant figures.

"Total trihalomethanes (TTHM)" means the sum of the concentrations of the trihalomethanes expressed in milligrams per liter (mg/L) and rounded to two significant figures. For the purpose of these regulations, the TTHM's shall mean trichloromethane (chloroform), dibromochloromethane, bromodichloromethane, and tribromomethane (bromoform).

"Transmission main" means a water main whose primary purpose is to move significant quantities of treated water among service areas.

"Treatment technique requirement" means a requirement which specifies for a contaminant a specific treatment technique(s) demonstrated to the satisfaction of the division to lead to a reduction in the level of such contaminant sufficient to comply with these regulations.

"Triggered source water monitoring" means monitoring required of any groundwater system as a result of a total coliform-positive sample in the distribution system.

"Trihalomethane (THM)" means one of the family of organic compounds, named as derivatives of methane, wherein three of the four hydrogen atoms in methane are each substituted by a halogen atom in the molecular structure.

"Two-stage lime softening" means a process in which chemical addition and hardness precipitation occur in each of two distinct unit clarification processes in series prior to filtration.

"Uncovered finished water storage facility" means a tank, reservoir, or other facility used to store water that will undergo no further treatment to reduce microbial pathogens (except residual disinfection) and is directly open to the atmosphere.

"Unregulated contaminant (UC)" means a contaminant for which a monitoring requirement has been established, but for which no MCL or treatment technique requirement has been established.

"Used water" means any water supplied by a water purveyor from the waterworks to a consumer's water system after it has passed through the service connection.

"Variance" means a conditional waiver of a specific regulation which is granted to a specific waterworks. A PMCL Variance is a variance to a Primary Maximum Contaminant Level, or a treatment technique requirement. An Operational Variance is a variance to an operational regulation or a Secondary Maximum Contaminant Level. Variances for monitoring, reporting and public notification requirements will not be granted.

"Virus" means a microbe that is infectious to humans by waterborne transmission.

"Volatile synthetic organic chemical (VOC)" means one of the family of manmade organic compounds generally characterized by low molecular weight and rapid vaporization at relatively low temperatures or pressures.

"Waterborne disease outbreak" means the significant occurrence of acute infectious illness, epidemiologically associated with the ingestion of water from a waterworks which is deficient in treatment, as determined by the commissioner or the State Epidemiologist.

"Water purveyor" (same as owner).

"Water supply" means water that shall have been taken into a waterworks from all wells, streams, springs, lakes, and other bodies of surface waters (natural or impounded), and the tributaries thereto, and all impounded groundwater, but

the term "water supply" shall not include any waters above the point of intake of such waterworks (see Article 2 (§ 32.1-167 et seq.) of Chapter 6 of Title 32.1 of the Code of Virginia).

"Water supply main" or "main" means any water supply pipeline that is part of a waterworks distribution system.

"Water Well Completion Report" means a report form published by the State Water Control Board entitled "Water Well Completion Report" which requests specific information pertaining to the ownership, driller, location, geological formations penetrated, water quantity and quality encountered as well as construction of water wells. The form is to be completed by the well driller.

"Waterworks" means a system that serves piped water for drinking or domestic use to (i) the public, (ii) at least 15 connections, or (iii) an average of 25 individuals for at least 60 days out of the year. The term "waterworks" shall include all structures, equipment and appurtenances used in the storage, collection, purification, treatment and distribution of pure water except the piping and fixtures inside the building where such water is delivered (see Article 2 (§ 32.1-167 et seq.) of Chapter 6 of Title 32.1 of the Code of Virginia).

"Waterworks with a single service connection" means a waterworks which supplies drinking water to consumers via a single service line.

"Wholesale waterworks" means a waterworks that treats source water as necessary to produce finished water and then delivers some or all of that finished water to another waterworks. Delivery may be through a direct connection or through the distribution system of one or more consecutive waterworks.

Part II
Operation Regulations for Waterworks

Article 1
General

12VAC5-590-340. General.

All physical, chemical, bacteriological, or radiological analyses for the purpose of demonstrating compliance with primary and secondary maximum contaminant levels, ~~or~~ action levels, or contaminants that do not have PMCLs but for which compliance samples must be analyzed by certified laboratories shall be performed by the Commonwealth of Virginia, Department of General Services, Division of Consolidated Laboratory Services (DCLS) or in laboratories certified by the Division of Consolidated Laboratory Services for such purposes. The owner is responsible for the collection and submission of all samples. A sample is deemed to have been collected only if and when its results are made known to the ~~Division of Water Supply Engineering~~ Office of Drinking Water.

12VAC5-590-350. Sanitary surveys.

A. Frequent ~~sanitary surveys~~ assessments shall be made by the owner of the water supply source and waterworks to locate and identify health hazards to the waterworks. The manner and frequency of making these ~~surveys~~ assessments, and the rate at which discovered health hazards are to be removed, shall be ~~in accordance with a program approved by the division~~ the responsibility of the owner. ~~These surveys shall be submitted to the division for review.~~ Every effort shall be made by the owner, to the extent of his jurisdiction, to prevent the degradation of the quality of water supply sources ~~(see Appendix E)~~. ~~The division may also perform sanitary surveys.~~

B. The commissioner may perform sanitary surveys. Owners shall provide any existing information that will enable the commissioner to conduct the sanitary survey.

C. A sanitary survey includes, but is not limited to, an onsite evaluation of all of the following eight components:

1. Source;

2. Treatment;

3. Distribution system;

4. Finished water storage;

5. Pumps, pumping facilities, and controls;

6. Monitoring, reporting, and data verification;

7. Waterworks management and operation; and

8. Number and classification of licensed operator(s) required in 12VAC5-590-460. Licensed operators shall also comply with all applicable regulations promulgated by the Virginia Board for Water Works and Wastewater Works Operators and Onsite Sewage System Professionals, Department of Professional and Occupational Regulation.

D. Significant deficiencies discovered as a result of a sanitary survey shall be addressed in accordance with the following:

1. The commissioner shall issue written notification describing the significant deficiency to the owner.

2. Within 30 days of the significant deficiency notification, the owner shall consult with the commissioner regarding the appropriate corrective action with a schedule for implementing corrective action. Any waterworks with significant deficiencies must have a Corrective Action Plan (CAP) as described in 12VAC5-590-421 A.

3. Within 45 days of the significant deficiency notification, the owner shall submit a CAP with a schedule for meeting the requirements of 12VAC5-590-421 A.

Article 2
General Information

12VAC5-590-370. Sampling frequency.

The commissioner may exempt consecutive waterworks that obtain potable water from another water system for distribution from all monitoring requirements in this section except for bacteriological (subsection A of this section), disinfectant residuals, byproducts and disinfection byproduct precursors (subdivision B 3 of this section), and lead and copper (subdivision B 6 of this section). The required sampling frequencies are as follows:

A. Bacteriological.

1. The owner shall collect total coliform samples at sites which are representative of water throughout the distribution system according to a written sample siting report. The report shall be established or approved by the district engineer after investigation of the source, method of treatment and storage, and protection of the water concerned. The report shall include, but is not limited to, the following:

a. The frequency of sampling distributed evenly throughout the month/quarter.

b. Distribution map showing the generalized location where specific sampling sites will be selected.

c. Supporting statement explaining how specific individual sites are selected, how sampling will be rotated among the sites, how repeat samples will be collected and other information demonstrating that sampling will be conducted in a manner to comply with this chapter.

d. Adequate sampling points to provide sampling representative of all the conditions in the system.

e. For small systems (less than 3,301 population), sample sites shall also be identified by address and code number location.

f. Minimum of three sample locations for each sample required monthly so repeat sample locations are previously ascertained as being adequate in number and five customer service connections upstream and downstream. (See Appendix J for an example.)

g. The sampling point required to be repeat sampled shall not be eliminated from future collections based on a history of questionable water quality unless the sampling point is unacceptable as determined by the district engineer.

2. The minimum number of bacteriological samples for total coliform evaluation to be collected and analyzed monthly from the distribution system of a community or nontransient noncommunity waterworks shall be in accordance with Table 2.1. Owners of all noncommunity waterworks that use a surface water source or a groundwater source under the direct influence of surface water, and large noncommunity (serving 1,000 or more persons per day) waterworks, shall collect and submit samples monthly for analysis in accordance with Table 2.1. Owners of all other noncommunity waterworks shall submit samples for analysis each calendar quarter in accordance with Table 2.1.

3. The samples shall be taken at reasonably evenly spaced time intervals throughout the month or quarter.

If the results of a sanitary survey or other factors determine that some other frequency is more appropriate than that stated above, a modified sampling program report may be required. The altered frequency shall be confirmed or changed on the basis of subsequent surveys.

TABLE 2.1

POPULATION SERVED PER DAY	MINIMUM NUMBER OF SAMPLES (See subdivision A 2 of this section)
25 to 1,000	1
1,001 to 2,500	2
2,501 to 3,300	3
3,301 to 4,100	4
4,101 to 4,900	5
4,901 to 5,800	6
5,801 to 6,700	7
6,701 to 7,600	8
7,601 to 8,500	9
8,501 to 12,900	10
12,901 to 17,200	15
17,201 to 21,500	20
21,501 to 25,000	25
25,001 to 33,000	30
33,001 to 41,000	40
41,001 to 50,000	50
50,001 to 59,000	60
59,001 to 70,000	70
70,001 to 83,000	80
83,001 to 96,000	90
96,001 to 130,000	100
130,001 to 220,000	120

220,001 to 320,000	150
320,001 to 450,000	180
450,001 to 600,000	210
600,001 to 780,000	240
780,001 to 970,000	270
970,001 to 1,230,000	300
1,230,001 to 1,520,000	330
1,520,001 to 1,850,000	360
1,850,001 to 2,270,000	390

4. All bacteriological analyses shall be performed in accordance with 12VAC5-590-440 by the DCLS or by a laboratory certified by DCLS for drinking water samples.

B. Chemical. The location of sampling points, the chemicals measured, the frequency, and the timing of sampling within each compliance period shall be established or approved by the commissioner at the time of issuance of a waterworks operation permit. The commissioner may increase required monitoring where necessary to detect variations within the waterworks. Analysis of field composite samples shall not be allowed. Samples for contaminants that may exhibit seasonal variations shall be collected during the period of the year when contamination is most likely to occur. Failure to comply with the sampling schedules in this section shall require public notification pursuant to 12VAC5-590-540.

Any other dates contained in this chapter notwithstanding, all waterworks shall comply with all applicable PMCLs listed in Tables 2.2 and 2.3.

Design criteria for new or modified waterworks or owners developing new sources of supply are found in 12VAC5-590-820, 12VAC5-590-830 and 12VAC5-590-840.

1. Inorganic chemical. Community and nontransient noncommunity waterworks owners shall conduct monitoring to determine compliance with the MCLs in Table 2.2 in accordance with this section. All other noncommunity waterworks owners shall conduct monitoring to determine compliance with the nitrate and nitrite PMCLs in Table 2.2 (as appropriate) in accordance with this section. Monitoring shall be conducted as follows:

a. The owner of any groundwater source waterworks with 150 or more service connections shall take a minimum of one sample at each entry point to the distribution system which is representative of each source, after treatment, unless a change in condition makes another sampling point more representative of each source or treatment plant (hereafter called a sampling point) starting in the compliance period beginning January 1, 1993. The owner of any groundwater source waterworks with fewer than 150 service connections shall take a minimum of one sample at each sampling point for asbestos, barium, cadmium, chromium, fluoride, mercury, nitrate, nitrite, and selenium in the compliance period beginning January 1, 1993, for antimony, beryllium, cyanide (as free cyanide), nickel, and thallium in the compliance period beginning January 1, 1996, and for arsenic (for community and nontransient noncommunity waterworks) in compliance with subdivision B 1 d (6) (b) of this section.

b. The owner of any waterworks which uses a surface water source in whole or in part with 150 or more service connections shall take a minimum of one sample at each entry point to the distribution system after any application of treatment or in the distribution system at a point which is representative of each source, after treatment, unless a change in conditions makes another sampling point more representative of each source or treatment plant (hereafter called a sampling point) beginning January 1, 1993. The owner of any waterworks which use a surface water source in whole or in part with fewer than 150 service connections shall take a minimum of one sample at each sampling point for asbestos, barium, cadmium, chromium, fluoride, mercury, nitrate, nitrite, and selenium beginning January 1, 1993, for antimony, beryllium, cyanide (as free cyanide), nickel, and thallium beginning January 1, 1996, and for arsenic (for community and nontransient noncommunity waterworks) in compliance with subdivision B 1 d (6) (a) of this section.

c. If a waterworks draws water from more than one source and the sources are combined before distribution, the owner shall sample at an entry point to the distribution system during periods of normal operating conditions (i.e., when water is representative of all sources being used).

d. The frequency of monitoring for asbestos shall be in accordance with subdivision B 1 d (1) of this section; the frequency of monitoring for barium, cadmium, chromium, fluoride, mercury, and selenium shall be in accordance with subdivision B 1 d (2) of this section; the frequency of monitoring for antimony, beryllium, cyanide (as free cyanide), nickel, and thallium shall be in accordance with subdivision B 1 d (3) of this section; the frequency of monitoring for nitrate shall be in accordance with subdivision B 1 d (4) of this section; the frequency of monitoring for nitrite shall be in accordance with subdivision B 1 d (5) of this section; and the frequency of monitoring for arsenic shall be in accordance with subdivision B 1 d (6) of this section.

(1) The frequency of monitoring conducted to determine compliance with the PMCL for asbestos specified in Table 2.2 shall be conducted as follows:

(a) The owner of each community and nontransient noncommunity waterworks is required to monitor for asbestos during the first three-year compliance period of each nine-year compliance cycle beginning in the compliance period starting January 1, 1993.

(b) If the owner believes the waterworks is not vulnerable to either asbestos contamination in its source water or due to corrosion of asbestos-cement pipe, or both, the owner may apply to the commissioner for a waiver of the monitoring requirement in subdivision B 1 d (1) (a) of this section. If the commissioner grants the waiver, the owner is not required to monitor.

(c) The commissioner may grant a waiver based on a consideration of the following factors:

(i) Potential asbestos contamination of the water source; and

(ii) The use of asbestos-cement pipe for finished water distribution and the corrosive nature of the water.

(d) A waiver remains in effect until the completion of the three-year compliance period. The owner of a waterworks not receiving a waiver shall monitor in accordance with the provisions of subdivision B 1 d (1) (a) of this section.

(e) The owner of a waterworks vulnerable to asbestos contamination due solely to corrosion of asbestos-cement pipe shall take one sample at a tap served by asbestos-cement pipe and under conditions where asbestos contamination is most likely to occur.

(f) The owner of a waterworks vulnerable to asbestos contamination due solely to source water shall monitor sampling points in accordance with subdivision B 1 of this section.

(g) The owner of a waterworks vulnerable to asbestos contamination due both to its source water supply and corrosion of asbestos-cement pipe shall take one sample at a tap served by asbestos-cement pipe and under conditions where asbestos contamination is most likely to occur.

(h) The owner of a waterworks which exceeds the PMCL as determined in 12VAC5-590-410 B 1 shall monitor quarterly beginning in the next quarter after the exceedance occurred.

(i) The commissioner may decrease the quarterly monitoring requirement to the frequency specified in subdivision B 1 d (1) (a) of this section provided the commissioner has determined that the waterworks is reliably and consistently below the PMCL. In no case can the commissioner make this determination unless the owner of a groundwater source waterworks takes a minimum of two quarterly samples or the owner of a waterworks which uses a surface water source in whole or in part takes a minimum of four quarterly samples.

(j) If monitoring data collected after January 1, 1990, are generally consistent with the requirements of subdivision B 1 d (1) of this section, then the commissioner may allow an owner to use that data to satisfy the monitoring requirement for the initial compliance period beginning January 1, 1993.

(2) The frequency of monitoring conducted to determine compliance with the MCLs in Table 2.2 for barium, cadmium, chromium, fluoride, mercury, and selenium shall be as follows:

(a) The owner of a groundwater source waterworks shall take one sample at each sampling point during each compliance period beginning in the compliance period starting January 1, 1993.

(b) The owner of a waterworks which uses a surface water source in whole or in part shall take one sample annually at each sampling point beginning January 1, 1993.

(c) An owner may apply to the commissioner for a waiver from the monitoring frequencies specified in subdivision B 1 d (2) (a) or (b) of this section.

(d) A condition of the waiver shall require that the owner shall take a minimum of one sample while the waiver is effective. The term during which the waiver is effective shall not exceed one compliance cycle (i.e., nine years).

(e) The commissioner may grant a waiver provided the owner of a waterworks that uses a surface water source in whole or in part has monitored annually for at least three years and groundwater waterworks have conducted a minimum of three rounds of monitoring. (At least one sample shall have been taken since January 1, 1990.) The owner of any waterworks which uses a surface water source in whole or in part or a groundwater source waterworks shall demonstrate that all previous analytical results were less than the PMCL. Waterworks that use a new water source are not eligible for a waiver until three rounds of monitoring from the new source have been completed.

(f) In determining the appropriate reduced monitoring frequency, the commissioner shall consider:

(i) Reported concentrations from all previous monitoring;

(ii) The degree of variation in reported concentrations; and

(iii) Other factors that may affect contaminant concentrations such as changes in groundwater pumping rates, changes in the waterworks configuration, changes in the waterworks operating procedures, or changes in stream flows or characteristics.

(g) A decision by the commissioner to grant a waiver shall be made in writing and shall set forth the basis for the determination. The request for a waiver may be initiated by the commissioner or upon an application by the owner. The owner shall specify the basis for the request. The commissioner shall review and, where appropriate, revise the determination of the appropriate monitoring frequency when the owner submits new monitoring data or when other data relevant to the waterworks appropriate monitoring frequency become available.

(h) Owners of waterworks that exceed the PMCLs as calculated in 12VAC5-590-410 shall monitor quarterly beginning in the next quarter after the exceedance occurred.

(i) The commissioner may decrease the quarterly monitoring requirement to the frequencies specified in subdivision B ~~2~~ 1 d (2) (a), (b) or (c) of this section provided a determination has been made that the waterworks is reliably and consistently below the PMCL. In no case can the commissioner make this determination unless the owner of a groundwater source waterworks takes a minimum of two quarterly samples or the owner of a waterworks which uses a surface water source in whole or in part takes a minimum of four quarterly samples.

(3) The frequency of monitoring conducted to determine compliance with the PMCLs in Table 2.2 for antimony, beryllium, cyanide (as free cyanide), nickel, and thallium shall be as follows:

(a) The owner of a groundwater source waterworks with 150 or more service connections shall take one sample at each sampling point during each compliance period beginning in the compliance period starting January 1, 1993. The owner of a groundwater source waterworks with fewer than 150 service connections shall take one sample at each sampling point during each compliance period beginning in the compliance period starting January 1, 1996.

(b) The owner of a waterworks that uses a surface water source in whole or in part with 150 or more service connections shall take one sample annually at each sampling point beginning January 1, 1993. The owner of a waterworks that uses a surface water source in whole or in part with fewer than 150 service connections shall take one sample annually at each sampling point beginning January 1, 1996.

(c) An owner may apply to the commissioner for a waiver from the monitoring frequencies specified in subdivision B ~~2~~ 1 d (3) (a) or (b) of this section.

(d) A condition of the waiver shall require that the owner take a minimum of one sample while the waiver is effective. The term during which the waiver is effective shall not exceed one compliance cycle (i.e., nine years).

(e) The commissioner may grant a waiver provided the owner of a waterworks that uses a surface water source in whole or in part has monitored annually for at least three years and groundwater waterworks have conducted a minimum of three rounds of monitoring. (At least one sample shall have been taken since January 1, 1990.) The owner of any waterworks which uses a surface water source in whole or in part or a groundwater source waterworks shall demonstrate that all previous analytical results were less than the PMCL. Waterworks that use a new water source are not eligible for a waiver until three rounds of monitoring from the new source have been completed.

(f) In determining the appropriate reduced monitoring frequency, the commissioner shall consider:

(i) Reported concentrations from all previous monitoring;

(ii) The degree of variation in reported concentrations; and

(iii) Other factors which may affect contaminant concentrations such as changes in groundwater pumping rates, changes in the waterworks configuration, changes in the waterworks operating procedures, or changes in stream flows or characteristics.

(g) A decision by the commissioner to grant a waiver shall be made in writing and shall set forth the basis for the determination. The request for a waiver may be initiated by the commissioner or upon an application by the owner. The owner shall specify the basis for the request. The commissioner shall review and, where appropriate, revise the determination of the appropriate monitoring frequency when the owner submits new monitoring data or when other data relevant to the waterworks appropriate monitoring frequency become available.

(h) Owners of waterworks that exceed the PMCLs as calculated in 12VAC5-590-410 shall monitor quarterly beginning in the next quarter after the exceedance occurred.

(i) The commissioner may decrease the quarterly monitoring requirement to the frequencies specified in subdivision B ~~2~~ 1 d (3) (a), (b) or (c) of this section provided a determination has been made that the waterworks is reliably and consistently below the PMCL. In no case shall the commissioner make this determination unless the owner of a groundwater source waterworks takes a minimum of two quarterly samples or the owner of a waterworks which uses a surface water source in whole or in part takes a minimum of four quarterly samples.

(4) All community, nontransient noncommunity and noncommunity waterworks owners shall monitor to determine compliance with the PMCL for nitrate in Table 2.2.

(a) Owners of community and nontransient noncommunity waterworks that use a groundwater source shall monitor annually beginning January 1, 1993.

(b) Owners of community and nontransient noncommunity waterworks that use a surface water source in whole or in part shall monitor quarterly beginning January 1, 1993.

(c) For owners of community and nontransient noncommunity waterworks that use groundwater, the repeat monitoring frequency shall be quarterly for at least one year following any one sample in which the concentration is greater than 50% of the PMCL. The commissioner may allow the owner of a waterworks, that uses groundwater, to reduce the sampling frequency to annually after four consecutive quarterly samples are reliably and consistently less than the PMCL.

(d) For community and nontransient noncommunity waterworks, the commissioner may allow the owner of a waterworks that uses a surface water source in whole or in part, to reduce the sampling frequency to annually if all analytical results from four consecutive quarters are less than 50% of the PMCL. Such waterworks shall return to quarterly monitoring if any one sample is greater than or equal to 50% of the PMCL.

(e) The owners of all other noncommunity waterworks shall monitor annually beginning January 1, 1993.

(f) After the initial round of quarterly sampling is completed, the owner of each community and nontransient noncommunity waterworks that is monitoring annually shall take subsequent samples during the quarter(s) which previously resulted in the highest analytical result.

(5) All owners shall monitor to determine compliance with the PMCL for nitrite in Table 2.2.

(a) All owners shall take one sample at each sampling point in the compliance period beginning January 1, 1993.

(b) After the initial sample, the owner of any waterworks where an analytical result for nitrite is less than 50% of the PMCL shall monitor at the frequency specified by the commissioner.

(c) The repeat monitoring frequency for any owner shall be quarterly for at least one year following any one sample in which the concentration is greater than 50% of the PMCL. The commissioner may allow an owner to reduce the sampling frequency to annually after determining the analysis results are reliably and consistently less than the PMCL.

(d) Owners of waterworks which are monitoring annually shall take each subsequent sample during the quarter(s) which previously resulted in the highest analytical result.

(6) The frequency of monitoring conducted to determine compliance with the PMCLs in Table 2.2 for arsenic shall be as follows:

(a) The owner of each community and nontransient noncommunity waterworks that uses a surface water source in whole or in part shall take one sample annually at each sampling point beginning January 23, 2006.

(b) The owner of each community and nontransient noncommunity groundwater source waterworks shall take one sample at each entry point during each compliance period starting January 23, 2006.

(c) Owners of waterworks that exceed the PMCL, as calculated in 12VAC5-590-410, shall monitor quarterly beginning in the next quarter after the exceedance has occurred.

(d) The commissioner may decrease the quarterly monitoring requirement to the frequencies specified in subdivision B 1 d (6) (a) or (b) of this section provided a determination has been made that the waterworks is reliably and consistently below the PMCL. In no case can the commissioner make this determination unless the owner of a groundwater source waterworks takes a minimum of two quarterly samples or the owner of a waterworks that uses a surface water source in whole or in part takes a minimum of four quarterly samples.

(e) No waivers shall be granted by the commissioner for arsenic.

2. Organic chemicals. Owners of all community and nontransient noncommunity waterworks shall sample for organic chemicals in accordance with their water source. Where two or more sources are combined before distribution, the owner shall sample at the entry point for the combined sources during periods of normal operating conditions.

a. Owners of waterworks that use groundwater shall take a minimum of one sample at each entry point to the distribution system which is representative of each source, after treatment (hereafter called a sampling point).

b. Owners of waterworks that use a surface water source in whole or in part shall take a minimum of one sample at points in the distribution system that are representative of each source or at each entry point to the distribution system, after treatment (hereafter called a sampling point).

c. The owner of each community and nontransient noncommunity waterworks shall take four consecutive quarterly samples for each contaminant listed in Table 2.3-VOC 2 through 21 and SOC during each compliance period, beginning in the compliance period starting January 1, 1993.

d. Reduced monitoring.

(1) VOC.

(a) If the initial monitoring for contaminants listed in Table 2.3-VOC 1 through 8 and the monitoring for the contaminants listed in Table 2.3-VOC 9 through 21 as allowed in subdivision B 2 d (1) (c) of this section has been completed by December 31, 1992, and the waterworks did not detect any contaminant listed in Table 2.3-VOC 1 through 21, then the owner of each groundwater waterworks and waterworks that use a surface water source in whole or in part shall take one sample annually beginning January 1, 1993.

(b) After a minimum of three years of annual sampling, the commissioner may allow the owner of a groundwater waterworks with no previous detection of any contaminant listed in Table 2.3-VOC 2 through 21 to take one sample during each compliance period.

(c) The commissioner may allow the use of monitoring data collected after January 1, 1988, for purposes of initial monitoring compliance. If the data are generally consistent with the other requirements in this section, the commissioner may use these data (i.e., a single sample rather than four quarterly samples) to satisfy the initial monitoring requirement of subdivision B 2 c of this section. Owners of waterworks that use grandfathered samples and did not detect any contaminants listed in Table 2.3-VOC, 2 through 21, shall begin monitoring annually in accordance with subdivision B 2 d (1) (a) of this section beginning January 1, 1993.

(2) SOC.

(a) Owners of waterworks serving more than 3,300 persons that do not detect a contaminant listed in Table 2.3-SOC in the initial compliance period, may reduce the sampling frequency to a minimum of two quarterly samples in one year during each repeat compliance period.

(b) Owners of waterworks serving less than or equal to 3,300 persons that do not detect a contaminant listed in Table 2.3-SOC in the initial compliance period may reduce the sampling frequency to a minimum of one sample during each repeat compliance period.

e. Waiver application.

(1) For VOCs. The owner of any community and nontransient noncommunity groundwater waterworks which does not detect a contaminant listed in Table 2.3-VOC may apply to the commissioner for a waiver from the requirements of subdivisions B 2 d (1) (a) and (b) of this section after completing the initial monitoring. A waiver shall be effective for no more than six years (two compliance periods). The commissioner may also issue waivers to small systems for the initial round of monitoring for 1,2,4-trichlorobenzene.

(2) For SOCs. The owner of any community and nontransient noncommunity waterworks may apply to the commissioner for a waiver from the requirement of subdivisions B 2 c and d (2) of this section. The owner shall reapply for a waiver for each compliance period.

f. The commissioner may grant a waiver after evaluating the following factors: Knowledge of previous use (including transport, storage, or disposal) of the contaminant within the watershed or zone of influence of the source. If a determination by the commissioner reveals no previous use of the contaminant within the watershed or zone of influence, a waiver may be granted. If previous use of the contaminant is unknown or it has been used previously, then the following factors shall be used to determine whether a waiver is granted.

(1) Previous analytical results.

(2) The proximity of the waterworks to a potential point or nonpoint source of contamination. Point sources include spills and leaks of chemicals at or near a waterworks or at manufacturing, distribution, or storage facilities, or from hazardous and municipal waste landfills and other waste handling or treatment facilities. Nonpoint sources for SOCs include the use of pesticides to control insect and weed pests on agricultural areas, forest lands, home and gardens, and other land application uses.

(3) The environmental persistence and transport of the contaminants listed in Table 2.3 VOC and SOC.

(4) How well the water source is protected against contamination, such as whether it is a waterworks that uses a surface water source in whole or in part or whether it is a groundwater source waterworks. Groundwater source waterworks shall consider factors such as depth of the well, the type of soil, wellhead protection, and well structure integrity. Owners of waterworks that use surface water in whole or in part shall consider watershed protection.

(5) Special factors.

(a) For VOCs. The number of persons served by the waterworks and the proximity of a smaller waterworks to a larger waterworks.

(b) For SOCs. Elevated nitrate levels at the waterworks supply source.

(c) For SOCs. Use of PCBs in equipment used in the production, storage, or distribution of water (i.e., PCBs used in pumps, transformers, etc.).

g. Condition for waivers.

(1) As a condition of the VOC waiver the owner of a groundwater waterworks shall take one sample at each sampling point during the time the waiver is effective (i.e., one sample during two compliance periods or six years) and update its vulnerability assessment considering the factors listed in subdivision B 2 f of this section. Based on this vulnerability assessment the commissioner shall reconfirm that the waterworks is nonvulnerable. If the commissioner does not make this reconfirmation within three years of the initial determination, then the waiver is invalidated and the owner is required to sample annually as specified in subdivision B 2 d (1) (a) of this section.

(2) The owner of any community and nontransient noncommunity waterworks that use surface water in whole or in part which does not detect a contaminant listed in Table 2.3-VOC may apply to the commissioner for a waiver from the requirements of subdivision B 2 d (1) (a) of this section after completing the initial monitoring. Waterworks meeting these criteria shall be determined by the commissioner to be nonvulnerable based on a vulnerability assessment during each compliance period. Each owner receiving a waiver shall sample at the frequency specified by the commissioner (if any).

(3) There are no conditions to SOC waivers.

h. If a contaminant listed in Table 2.3-VOC 2 through 21 or SOC 1 through 33 is detected then (NOTE: Detection occurs when a contaminant level exceeds the current detection limit as defined by EPA.):

(1) Each owner shall monitor quarterly at each sampling point which resulted in a detection.

(2) The commissioner may decrease the quarterly monitoring requirement specified in subdivision B 2 h (1) of this section provided it has determined that the waterworks is reliably and consistently below the PMCL. In no case shall the commissioner make this determination unless the owner of a groundwater waterworks takes a minimum of two quarterly samples and the owner of a waterworks that use surface water in whole or in part takes a minimum of four quarterly samples.

(3) If the commissioner determines that the waterworks is reliably and consistently below the PMCL, the commissioner may allow the waterworks to monitor annually. Owners of waterworks that monitor annually shall monitor during the quarter(s) that previously yielded the highest analytical result.

(4) Owners of waterworks that have three consecutive annual samples with no detection of a contaminant may apply to the commissioner for a waiver for VOC as specified in subdivision B 2 e (1) or to SOC as specified in subdivision B 2 e (2) of this section.

(5) Subsequent monitoring due to contaminant detection.

(a) Owners of groundwater waterworks that have detected one or more of the following two-carbon organic compounds: trichloroethylene, tetrachloroethylene, 1,2-dichloroethane, 1,1,1-trichloroethane, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene, or 1,1-dichloroethylene shall monitor quarterly for vinyl chloride. A vinyl chloride sample shall be taken at each sampling point at which one or more of the two-carbon organic compounds was detected. If the results of the first analysis do not detect vinyl chloride, the commissioner may reduce the quarterly monitoring frequency of vinyl chloride monitoring to one sample during each compliance period. Owners of waterworks that use surface water in whole or in part are required to monitor for vinyl chloride as specified by the commissioner.

(b) If monitoring results in detection of one or more of certain related contaminants (heptachlor and heptachlor epoxide), then subsequent monitoring shall analyze for all related contaminants.

i. Owners of waterworks that violate the requirements of Table 2.3 for VOCs or SOCs, as determined by 12VAC5-590-410 C, shall monitor quarterly. After a minimum of four consecutive quarterly samples that show the waterworks is in compliance as specified in 12VAC5-590-410 C and the commissioner determines that the waterworks is reliably and consistently below the PMCL, the owner may monitor at the frequency and time specified in subdivision B 2 h (3) of this section.

3. Disinfectant residuals, disinfection byproducts and disinfection byproduct precursors.

a. Unless otherwise noted, owners of all waterworks that use a chemical disinfectant shall comply with the requirements of this section as follows:

(1) Owners of community or nontransient noncommunity waterworks that use surface water or groundwater under the direct influence of surface water and serving 10,000 or more persons shall comply with this section beginning January 1, 2002.

(2) Owners of community or nontransient noncommunity waterworks that use surface water or groundwater under the direct influence of surface water serving fewer than 10,000 persons and waterworks using only groundwater

not under the direct influence of surface water shall comply with this section beginning January 1, 2004.

(3) Owners of transient noncommunity waterworks that use surface water or groundwater under the direct influence of surface water and serving 10,000 or more persons and using chlorine dioxide as a disinfectant or oxidant shall comply with any requirements for chlorine dioxide in this section beginning January 1, 2002.

(4) Owners of transient noncommunity waterworks that use surface water or groundwater under the direct influence of surface water serving fewer than 10,000 persons and using chlorine dioxide as a disinfectant or oxidant and waterworks using only groundwater not under the direct influence of surface water and using chlorine dioxide as a disinfectant or oxidant shall comply with any requirements for chlorine dioxide in this section beginning January 1, 2004.

b. Owners shall take all samples during normal operating conditions.

(1) Analysis under this section for disinfection byproducts (TTHM, HAA5, chlorite and bromate) shall be conducted by a laboratory that has received certification by EPA or the state except as noted in subdivision B 3 b (2) of this section.

(2) Measurement under this section of daily chlorite samples at the entry point to the distribution system, disinfection residuals (free chlorine, combined chlorine, total chlorine and chlorine dioxide), alkalinity, bromide, TOC, SUVA (DOC and UV_{254}), pH and magnesium shall be made by a party approved by the commissioner.

(3) DPD colorimetric test kits may be used to measure residual disinfectant concentrations for chlorine, chloramines and chlorine dioxide.

c. Failure to monitor in accordance with the monitoring plan required under subdivision B 3 j of this section is a monitoring violation. Failure to monitor shall be treated as a violation for the entire period covered by the annual average where compliance is based on a running annual average of monthly or quarterly samples or averages and the owner's failure to monitor makes it impossible to determine compliance with PMCLs or MRDLs.

d. Owners may use only data collected under the provisions of this section or the US EPA Information Collection Rule, 40 CFR Part 141 Subpart M, Information Collection Requirements (ICR) for Public Water Systems, to qualify for reduced monitoring.

e. TTHM/HAA5 monitoring. Owners of community or nontransient noncommunity waterworks shall monitor TTHM and HAA5 at the frequency indicated below, unless otherwise indicated:

(1) Running annual average monitoring requirements.

(a) Routine monitoring requirements:

(i) Owners of waterworks using surface water or groundwater under the direct influence of surface water and serving at least 10,000 persons shall collect four water samples per quarter per treatment plant. At least 25% of all samples collected each quarter shall be at locations representing maximum residence time in the distribution system. The remaining samples shall be taken at locations representative of at least average residence time in the distribution system and representative of the entire distribution system. When setting the sample locations the waterworks shall take into account number of persons served, different sources of water, and different treatment methods.

(ii) Owners of waterworks using surface water or groundwater under the direct influence of surface water and serving from 500 to 9,999 persons shall collect one sample per quarter per treatment plant. The sample location shall represent maximum residence time in the distribution system.

(iii) Owners of waterworks using surface water or groundwater under the direct influence of surface water and serving fewer than 500 persons shall collect one sample per year per treatment plant during the month of warmest water temperature. The sample location shall represent maximum residence time in the distribution system. If the sample (or average of annual samples, if more than one sample is taken) exceeds PMCL in Table 2.13, the owner shall increase monitoring to one sample per treatment plant per quarter, taken at a point reflecting the maximum residence time in the distribution system, until waterworks meets reduced monitoring criteria.

(iv) Owners of waterworks using only groundwater not under direct influence of surface water using chemical disinfectant and serving at least 10,000 persons shall collect one sample per quarter per treatment plant. The sample location shall represent maximum residence time in the distribution system.

(v) Owners of waterworks using only groundwater not under direct influence of surface water using chemical disinfectant and serving fewer than 10,000 persons shall collect one sample per year per treatment plant during the month of warmest water temperature. The sample location shall represent maximum residence time in the distribution system. If the sample (or average of annual samples, if more than one sample is taken) exceeds PMCL in Table 2.13, the owner shall increase monitoring to one sample per treatment plant per quarter, taken at a point reflecting the maximum residence time in the distribution system, until the waterworks meets the

criteria for reduced monitoring found in subdivision B 3 e (1) (d) of this section.

(vi) If an owner elects to sample more frequently than the minimum required, at least 25% of all samples collected each quarter (including those taken in excess of the required frequency) shall be taken at locations that represent the maximum residence time of the water in the distribution system. The remaining samples shall be taken at locations representative of at least average residence time in the distribution system.

(vii) With prior approval of the commissioner, owners of waterworks that utilize multiple wells from a common aquifer may consider these multiple sources as one treatment plant for determining the minimum number of samples to be collected for TTHM and HAA5 analysis.

(b) After one year of routine monitoring an owner may reduce monitoring, except as otherwise provided, as follows:

(i) Owners of waterworks using surface water or groundwater under the direct influence of surface water and serving at least 10,000 persons that has a source water annual average TOC level, before any treatment, of equal to or less than 4.0 mg/L and a TTHM annual average equal to or less than 0.040 mg/L and HAA5 annual average equal to or less than 0.030 mg/L may reduce its monitoring to one sample per treatment plant per quarter at a distribution system location reflecting maximum residence time.

(ii) Owners of waterworks using surface water or groundwater under the direct influence of surface water serving from 500 to 9,999 persons that has a source water annual average TOC level, before any treatment, equal to or less than 4.0 mg/L and a TTHM annual average equal to or less than 0.040 mg/L and HAA5 annual average equal to or less than 0.030 mg/L may reduce its monitoring to one sample per treatment plant per year at a distribution system location reflecting maximum residence time during the month of warmest water temperature.

(iii) Owners of waterworks using only groundwater not under the direct influence of surface water, using chemical disinfectant and serving at least 10,000 persons that has a TTHM annual average of equal to or less than 0.040 mg/L and HAA5 annual average of equal to or less than 0.030 mg/L may reduce its monitoring to one sample per treatment plant per year at a distribution system location reflecting maximum residence time during the month of warmest water temperature.

(iv) Owners of waterworks using only groundwater not under the direct influence of surface water, using chemical disinfectant and serving fewer than 10,000 persons that has a TTHM annual average equal to or less than 0.040 mg/L and HAA5 annual average equal to or less than 0.030 mg/L for two consecutive years or TTHM annual average equal to or less than 0.020 mg/L and HAA5 annual average of equal to or less than 0.015 mg/L for one year may reduce its monitoring to one sample per treatment plant per three-year monitoring cycle at a distribution system location reflecting maximum residence time during the month of warmest water temperature, with the three-year cycle beginning on January 1 following the quarter in which the system qualifies for reduced monitoring.

(v) Owners of waterworks using surface water or groundwater under the direct influence of surface water serving fewer than 500 persons may not reduce its monitoring to less than one sample per treatment plant per year.

(vi) In order to qualify for reduced monitoring for TTHM and HAA5 under subdivision B 3 e (1) (b) (i) through (iv) of this section, owners of waterworks using surface water or groundwater under the direct influence of surface water not monitoring under the provisions of subdivision B 3 (i) shall take monthly TOC samples every 30 days at a location prior to any treatment, beginning April 1, 2008. In addition to meeting other criteria for reduced monitoring in subdivision B 3 e (1) (b) (i) through (iv) of this section, the source water TOC running annual average shall be less than or equal to 4.0 mg/L (based on the most recent four quarters of monitoring) on a continuing basis at each treatment plant to reduce or remain on reduced monitoring for TTHM and HAA5. Once qualified for reduced monitoring for TTHM and HAA5 under subdivision B 3 e (1) (b) (i) through (iv) of this section, a system may reduce source water TOC monitoring to quarterly TOC samples taken every 90 days at a location prior to any treatment.

(c) Owners of waterworks on a reduced monitoring schedule may remain on that reduced schedule as long as the average of all samples taken in the year (for waterworks that must monitor quarterly) or the result of the sample (for waterworks that must monitor no more frequently than annually) is no more than 0.060 mg/L and 0.045 mg/L for TTHMs and HAA5, respectively. Owners of waterworks that do not meet these levels shall resume monitoring at the frequency identified in subdivision B 3 e (1) (a) of this section in the quarter immediately following the monitoring period in which the waterworks exceeds 0.060 mg/L or 0.045 mg/L for TTHMs and HAA5, respectively. For waterworks using only groundwater not under the direct influence of surface water and serving fewer than 10,000 persons, if either the TTHMs annual average is greater than 0.080 mg/L or the HAA5 annual average is greater than 0.060 mg/L, the owner shall go to increased monitoring identified in subdivision B 3 e (1) (a) of this section in

the quarter immediately following the monitoring period in which the waterworks exceeds 0.080 mg/L or 0.060 mg/L for TTHM or HAA5 respectively.

(d) Owners of waterworks on increased monitoring may return to routine monitoring if, after at least one year of monitoring, their TTHM annual average is equal to or less than 0.060 mg/L and their HAA5 annual average is equal to or less than 0.045 mg/L.

(e) The commissioner may return a waterworks to routine monitoring at the commissioner's discretion.

(2) Initial distribution system evaluations (IDSE).

(a) This subdivision establishes monitoring and other requirements for identifying locational running annual average (LRAA) compliance monitoring locations for determining compliance with maximum contaminant levels for total trihalomethanes (TTHM) and haloacetic acids (five) (HAA5). Owners shall use an IDSE to determine locations with representative high TTHM and HAA5 concentrations throughout the distribution system. IDSEs are used in conjunction with, but separate from running annual average compliance monitoring locations, subdivision B 3 e (1) (a) of this section, to identify and select locational running annual average compliance monitoring locations, subdivision B 3 e (3) of this section.

(b) This subdivision applies to the following waterworks:

(i) Community waterworks that use a primary or residual disinfectant other than ultraviolet light or delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light; or,

(ii) Nontransient noncommunity waterworks that serve at least 10,000 people and use a primary or residual disinfectant other than ultraviolet light or delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light.

(c) Owners shall comply with the following schedule:

Waterworks Population	Owners shall submit a standard monitoring plan or system specific study plan[1] or 40/30 certification[2] to the commissioner by or receive very small system waiver from the commissioner.	Owners shall complete standard monitoring or system specific study by	Owners shall submit IDSE report to the commissioner by[3]
Waterworks that are not part of a combined distribution system and waterworks that serve the largest population in the combined distribution system			
Equal to or greater than 100,000	October 1, 2006	September 30, 2008	January 1, 2009
50,000-99,999	April 1, 2007	March 31, 2009	July 1, 2009
10,000-49,999	October 1, 2007	September 30, 2009	January 1, 2010
Less than 10,000 (CWS Only)	April 1, 2008	March 31, 2010	July 1, 2010
Other waterworks that are part of a combined distribution system			
Wholesale waterworks or consecutive waterworks	-at the same time as the waterworks with the earliest compliance date in the combined distribution system	-at the same time as the waterworks with the earliest compliance date in the combined distribution system	-at the same time as the waterworks with the earliest compliance date in the combined distribution system

[1]If, within 12 months after the date identified in this column, the commissioner does not approve the plan or notify the owner that the review has been completed; the owner may consider the submitted plan as approved. The owner shall implement the plan and shall complete standard monitoring or a system specific study no later than the date identified in the third column.

[2]The owner shall submit the 40/30 certification under subdivision B 3 e (2) (d) (v) of this section by the date indicated.

[3]If, within three months after the date identified in this column (nine months after the date identified in this column if the owner is required to comply with the schedule for waterworks populations 10,000 to 49,999), the commissioner does not approve the IDSE report or notify the owner that the review has not been completed, the owner may consider the submitted report as approved and the owner shall implement the recommended monitoring in accordance with subdivision B 3 e (3) of this section as required.

For the purpose of this schedule, the commissioner has determined that the combined distribution system does not include consecutive waterworks that receive water from a wholesale waterworks only on an emergency basis or receive less than 10% of their total water consumption from a wholesale waterworks. The commissioner has also determined that the combined distribution system does not include wholesale waterworks that deliver water to a consecutive waterworks only on an emergency basis or delivers less than 10% of the total water used by a consecutive waterworks.

(d) Owners shall conduct standard monitoring that meets the requirements in subdivision B 3 e (2) (d) (iii) of this section, or a system specific study that meets the requirements in subdivision B 3 e (2) (d) (iv) of this section, or certify to the commissioner that the waterworks meets 40/30 certification criteria under subdivision B 3 e (2) (d) (v) of this section, or qualify for a very small system waiver under subdivision B 3 e (2) (d) (vi) of this section.

(i) Owners shall have taken the full complement of routine TTHM and HAA5 compliance samples required of a waterworks based on population and source water under subdivision B 3 e (1) of this section (or the owner shall have taken the full complement of reduced TTHM and HAA5 compliance samples required of an owner based population and source water under subdivision B 3 e (1) of this section if the waterworks meet reduced monitoring criteria under subdivision B 3 e (1)) of this section during the period specified in subdivision B 3 e (2) (d) (v) ((a)) of this section to meet the 40/30 certification criteria in subdivision B 3 e (2) (d) (v) of this section. Owners shall have taken TTHM and HAA5 samples under subdivision B 3 e (1) of this section to be eligible for the very small system waiver in subdivision B 3 e (2) (d) (vi) of this section.

(ii) If the owner has not taken the required samples, the owner shall conduct standard monitoring that meets the requirements in subdivision B 3 e (2) (d) (iii) of this section, or a system specific study that meets the requirements in subdivision B 3 e (2) (d) (iv) of this section.

(iii) Standard Monitoring.

((a)) The standard monitoring plan shall comply with the following paragraphs ((i)) through ((iv)). Owners shall prepare and submit the standard monitoring plan to the commissioner according to the schedule in subdivision B 3 e (2) (c) of this section.

((i)) The standard monitoring plan shall include a schematic of the waterworks distribution system (including distribution system entry points and their sources, and storage facilities), with notes indicating locations and dates of all projected standard monitoring, and all projected compliance monitoring in accordance with subdivision B 3 e (1) of this section.

((ii)) The standard monitoring plan shall include justification of standard monitoring location selection and a summary of data relied on to justify standard monitoring location selection.

((iii)) The standard monitoring plan shall specify the population served and waterworks type (surface water, groundwater under the direct influence of surface water or groundwater).

((iv)) Owners shall retain a complete copy of the submitted standard monitoring plan, including any modification required by the commissioner of the standard monitoring plan, for as long as the owner is required to retain the IDSE report under subdivision B 3 e (2) (d) (iii) ((c)) ((iv)) of this section.

((b)) Owners shall monitor as indicated in the following table. Owners shall collect dual sample sets at each monitoring location. One sample in the dual sample set shall be analyzed for TTHM. The other sample in the dual sample set shall be analyzed for HAA5. Owners shall conduct one monitoring period during the peak historical month for TTHM levels or HAA5 levels or the month of warmest water temperature. Owners shall review available compliance, study, or operational data to determine the peak historical month for TTHM or HAA5 levels or warmest water temperature.

Source Water Type	Population Size Category	Monitoring Periods and Frequency of Sampling	Distribution System Monitoring Locations[1]				
			Total per monitoring period	Near Entry Points	Average Residence Time	High TTHM Locations	High HAA5 Locations
Surface water or ground-water	Less than 500 consecutive ~~systems~~ waterworks	one (during peak historical month)[2]	2	1		1	

under the direct influence of surface water.	Less than 500 nonconsecutive ~~systems~~ waterworks		2			1	1
	500-3,300 consecutive ~~systems~~ waterworks	four (every 90 days)	2	1		1	
	500-3,300 nonconsecutive ~~systems~~ waterworks		2			1	1
	3,301-9,999		4		1	2	1
	10,000-49,999	six (every 60 days)	8	1	2	3	2
	50,000-249,999		16	3	4	5	4
	250,000-999,999		24	4	6	8	6
	1,000,000-4,999,999		32	6	8	10	8
	Equal to or greater than 5,000,000		40	8	10	12	10
Ground-water	Less than 500 consecutive ~~systems~~ waterworks	one (during peak historical month)[2]	2	1		1	
	Less than 500 nonconsecutive ~~systems~~ waterworks		2			1	1
	500-9,999	four (every 90 days)	2			1	1
	10,000-99,999		6	1	1	2	2
	100,000-499,999		8	1	1	3	3
	Equal to or greater than 500,000		12	2	2	4	4

[1]A dual sample set (i.e., a TTHM and an HAA5 sample) shall be taken at each monitoring location during each monitoring period.

[2]The peak historical month is the month with the highest TTHM or HAA5 levels or the warmest water temperature.

((i)) Owners shall take samples at locations other than the existing monitoring locations used in subdivision B 3 e (1) of this section. Monitoring locations shall be distributed throughout the distribution system.

((ii)) If the number of entry points to the distribution system is fewer than the specified number of entry point monitoring locations, excess entry point samples shall be replaced equally at high TTHM and HAA5 locations. If there is an odd extra location number, the owner shall take a sample at a high TTHM location. If the number of

entry points to the distribution system is more than the specified number of entry point monitoring locations, owners shall take samples at entry points to the distribution system having the highest annual water flows.

((iii)) The monitoring under subdivision B 3 e (2) (d) (iii) ((b)) of this section may not be reduced.

((c)) The IDSE report shall include the elements required in the following paragraphs. Owners shall submit the IDSE report to the commissioner according to the schedule in subdivision B 3 e (2) (c) of this section.

((i)) The IDSE report shall include all TTHM and HAA5 analytical results from compliance monitoring required under subdivision B 3 e (1) of this section and all standard monitoring conducted during the period of the IDSE as individual analytical results and LRAAs presented in a tabular or spreadsheet format acceptable to the commissioner. If changed from the standard monitoring plan submitted under subdivision B 3 e (2) (d) (iii) ((a)) of this section, the report shall also include a schematic of the distribution system, the population served, and system type (surface water, groundwater under the direct influence of surface water or groundwater).

((ii)) The IDSE report shall include an explanation of any deviations from the approved standard monitoring plan.

((iii)) Owners shall recommend and justify the compliance monitoring locations to be used in accordance with subdivision B 3 e (3) of this section and timing based on the protocol in subdivision B 3 e (2) (e) of this section.

((iv)) Owners shall retain a complete copy of the IDSE report submitted under this section for 10 years after the date the report was submitted to the commissioner. If the commissioner modifies the LRAA monitoring requirements recommended in the IDSE report or if the commissioner approves alternative monitoring locations, the owner shall keep a copy of the commissioner's notification on file for 10 years after the date of the commissioner's notification. The owner shall make the IDSE report and any commissioner's notification available for review by the commissioner or the public.

(iv) System Specific Studies.

((a)) The system specific study plan shall be based on either existing monitoring results as required under subdivision B 3 e (2) (d) (iv) ((a)) or modeling as required under subdivision B 3 e (2) (d) (iv) ((a)) of this section. Owners shall prepare and submit the waterworks specific study plan to the commissioner according to the schedule in subdivision B 3 e (2) (c) of this section.

((i)) Existing monitoring results. Owners may comply by submitting monitoring results collected before the waterworks is required to begin monitoring under subdivision B 3 e (2) (c) of this section. The monitoring results and analysis shall meet the criteria in subdivisions ((1)) and ((2)) as follows:

((1)) Minimum requirements.

((A)) TTHM and HAA5 results shall be based on samples collected and analyzed in accordance with 12VAC5-590-440. Samples shall be collected no earlier than five years prior to the study plan submission date.

((B)) The monitoring locations and frequency shall meet the conditions identified in the following table. Each location shall be sampled once during the peak historical month for TTHM levels or HAA5 levels or the month of warmest water temperature for every 12 months of data submitted for that location. Monitoring results shall include all compliance monitoring results in accordance with subdivision B 3 e (1) of this section plus additional monitoring results as necessary to meet minimum sample requirements.

System Type	Population Size Category	Number of Monitoring Locations	Number of Samples	
			TTHM	HAA5
Surface water or groundwater under the direct influence of surface water	Less than 500	3	3	3
	500-3,300	3	9	9
	3,301-9,999	6	36	36
	10,000-49,999	12	72	72
	50,000-249,999	24	144	144
	250,000-999,999	36	216	216
	1,000,000-4,999,999	48	288	288
	Equal to or greater than 5,000,000	60	360	360
Groundwater	Less than 500	3	3	3
	500-9,999	3	9	9
	10,000-99,999	12	48	48
	100,000-499,999	18	72	72
	Equal to or greater than 500,000	24	96	96

((2)) Reporting monitoring results. Owners shall report the following information:

((A)) Owners shall report previously collected monitoring results and certify that the reported monitoring results include all compliance and non-compliance results generated during the time period beginning with the first reported result and ending with the most recent results collected in accordance with subdivision B 3 e (1) of this section.

((B)) Owners shall certify that the samples were representative of the entire distribution system and that treatment, and distribution system have not changed significantly since the samples were collected.

((C)) The study monitoring plan shall include a schematic of the distribution system (including distribution system entry points and their sources, and storage facilities), with notes indicating the locations and dates of all completed or planned system specific study monitoring.

((D)) The system specific study plan shall specify the population served and system type (surface water, groundwater under the direct influence of surface water or groundwater).

((E)) Owners shall retain a complete copy of the system specific study plan submitted, including any modification requested by the commissioner of the system specific study plan, for as long as the owner is required to retain the IDSE report under subdivision B 3 e (2) (d) (iv) ((b)) ((vii)) of this section.

((F)) If previously collected data that fully meets the number of samples required under subdivision B 3 e (2) (d) (iv) ((a)) ~~((ii))~~ ((i)) ((1)) ((b)) of this section and the commissioner rejects some of the data, the owner shall either conduct additional monitoring to replace rejected data on a schedule the commissioner approves or conduct standard monitoring under subdivision B 3 e (2) (d) (iii) of this section.

((ii)) Modeling. Owners may comply through analysis of an extended period simulation hydraulic model. The extended period simulation hydraulic model and analysis shall meet the following criteria:

((1)) Minimum requirements.

((A)) The model shall simulate 24-hour variation in demand and show a consistently repeating 24-hour pattern of residence time.

((B)) The model shall represent the criteria listed in the following table:

75% of pipe volume;
50% of pipe length;
All pressure zones;
All 12-inch diameter and larger pipes;
All 8-inch and larger pipes that connect pressure zones, influence zones from different sources, storage facilities, major demand areas, pumps, and control valves, or are known or expected to be significant conveyors of water;
All 6-inch and larger pipes that connect remote areas of a distribution system to the main portion of the system;
All storage facilities with standard operations represented in the model; and
All active pump stations with controls represented in the model; and
All active control valves.

((C)) The model shall be calibrated, or have calibration plans, for the current configuration of the distribution system during the period of high TTHM formation potential. All storage facilities shall be evaluated as part of the calibration process. All required calibration shall be completed no later than 12 months after plan submission.

((2)) Reporting modeling. The system specific study plan shall include the following information:

((A)) Tabular or spreadsheet data demonstrating that the model meets requirements in subdivision B 3 e (2) (d) (iv) ((a)) ((ii)) ((1)) ((b)) of this section.

((B)) A description of all calibration activities undertaken, and if calibration is complete, a graph of predicted tank levels versus measured tank levels for the storage facility with the highest residence time in each pressure zone, and a time series graph of the residence time at the longest residence time storage facility in the distribution system showing the predictions for the entire simulation period (i.e., from time zero until the time it takes to for the model to reach a consistently repeating pattern of residence time).

((C)) Model output showing preliminary 24-hour average residence time predictions throughout the distribution system.

((D)) Timing and number of samples representative of the distribution system planned for at least one monitoring period of TTHM and HAA5 dual sample monitoring at a number of locations no less than would be required for the system under standard monitoring in subdivision B 3 e (2) (d) (iii) of this section during the

historical month of high TTHM. These samples shall be taken at locations other than existing compliance monitoring locations listed in subdivision B 3 e (1) ~~(a)~~ of this section.

((E)) Description of how all requirements will be completed no later than 12 months after owner submits the system specific study plan.

((F)) Schematic of the distribution system (including distribution system entry points and their sources, and storage facilities), with notes indicating the locations and dates of all completed system specific study monitoring (if calibration is complete) and all compliance monitoring listed in subdivision B 3 e (1) ~~(a)~~ of this section.

((G)) Population served and system type (surface water, groundwater under the direct influence of surface water or groundwater).

((H)) Owners shall retain a complete copy of the system specific study plan submitted, including any modification recommended by the commissioner to the waterworks specific study plan, for as long as the owner is required to retain the IDSE report under subdivision B 3 e (2) (d) (iv) ((b)) ((vii)) of this section.

((3)) If an owner submits a model that does not fully meet the requirements under paragraph (iv) ((a)) ((ii)) of this section, the owners shall correct the deficiencies and respond to commissioner's inquiries concerning the model. If the owner fails to correct deficiencies or respond to inquiries to the commissioner's satisfaction, the owner shall conduct standard monitoring under subdivision B 3 e (2) (d) (iii) of this section.

((b)) The IDSE report shall include the elements required in the following paragraphs. Owners shall submit the IDSE report according to the schedule in subdivision B 3 e (2) (c) of this section.

((i)) The IDSE report shall include all TTHM and HAA5 analytical results from compliance monitoring in subdivision B 3 e (1) ~~(a)~~ of this section and all system specific study monitoring conducted during the period of the system specific study presented in a tabular or spreadsheet format acceptable to the commissioner. If changed from the system specific study plan submitted under subdivision B 3 e (2) (d) (iv) ((a)) of this section, the IDSE report shall also include a schematic of the distribution system, the population served; and system type (surface water, groundwater under the direct influence of surface water or groundwater).

((ii)) Owners of waterworks using the modeling provision under subdivision B 3 e (2) (d) (iv) ((a)) ((ii)) of this section shall include final information for the elements described in subdivision B 3 e (2) (d) (iv) ((a)) ((ii)) ((2)) of this section, and a 24-hour time series graph of residence time for each LRAA compliance monitoring location selected.

((iii)) The owner shall recommend and justify LRAA compliance monitoring locations and timing based on the protocol in subdivision B 3 e (2) (e) of this section.

((iv)) The IDSE report shall include an explanation of any deviations from the waterworks approved system specific study plan.

((v)) The IDSE report shall include the basis (analytical and modeling results) and justification the owner used to select the recommended LRAA monitoring locations.

((vi)) The owner may submit the IDSE report in lieu of the system specific study plan on the schedule identified in subdivision B 3 e (2) (c) of this section for submission of the system specific study plan if the owner believes the necessary information has been obtained by the time that the waterworks specific study plan is due. If the owner elects this approach, the IDSE report shall also include all information required under subdivision B 3 e (2) (d) (iv) ((a)) of this section.

((vii)) The owner shall retain a complete copy of the IDSE report submitted under this subdivision for 10 years after the date submitted. If the commissioner modifies the LRAA monitoring requirements that the owner recommended in the IDSE report or if the commissioner approves alternative monitoring locations, the owner shall keep a copy of the commissioner's notification on file for 10 years after the date of the commissioner's notification. The owner shall make the IDSE report and any notification from the commissioner available for review by the commissioner or the public.

(v) 40/30 certifications.

((a)) Eligibility. Waterworks are eligible for 40/30 certification if the waterworks had no TTHM or HAA5 monitoring violations under subdivision B 3 e (1) of this section and no individual sample exceeded 0.040 mg/L for TTHM or 0.030 mg/L for HAA5 during an eight consecutive calendar quarter period beginning no earlier than the date specified in the following table.

If the waterworks 40/30 Certification Is Due	Then the waterworks eligibility for 40/30 certification is based on eight consecutive calendar quarters of compliance monitoring under subdivision B 3 e (1) results beginning no earlier than[1]
October 1, 2006	January 2004
April 1, 2007	January 2004
October 1, 2007	January 2005
April 1, 2008	January 2005

[1]Unless the waterworks is on reduced monitoring under subdivision B 3 e (1) of this section and was not required to monitor during the specified period. If the owner did not monitor during the specified period, the owner shall base eligibility on compliance samples taken during the 12 months preceding the specified period.

((b)) Requirements for 40/30 certification:

((i)) Certify to the commissioner that every individual compliance sample taken under subdivision B 3 e (1) of this section during the periods specified in subdivision B 3 e (2) (d) (v) ((a)) of this section were less than or equal to 0.040 mg/L for TTHM and less than or equal to 0.030 mg/L for HAA5, and that the waterworks has not had any TTHM or HAA5 monitoring violations during the period specified in subdivision ((a)).

((ii)) The commissioner may require the owner to submit compliance monitoring results, distribution system schematics, and/or recommended LRAA compliance monitoring locations in addition to the certification. If an owner fails to submit the requested information, the commissioner may require standard monitoring under subdivision B 3 e (2) (d) (iii) of this section or a system specific study under subdivision B 3 e (2) (d) (iv) of this section.

((iii)) The commissioner may still require standard monitoring under subdivision B 3 e (2) (d) (iii) or a system specific study under subdivision B 3 e (2) (d) (iv) of this section even if the waterworks meet the criteria in subdivision B 3 e (2) (d) (v) ((a)) of this section.

((iv)) The owner shall retain a complete copy of the certification submitted under this subdivision for 10 years after the date that the owner submitted the certification. The owner shall make the certification, all data upon which the certification is based, and any notification from the commissioner available for review by the commissioner or the public.

(vi) Very small system waivers.

((a)) If the waterworks serves fewer than 500 people and has taken TTHM and HAA5 samples under subdivision B 3 e (1) of this section, the owner is not required to comply with this subdivision unless the commissioner notifies the owner to conduct standard monitoring under subdivision B 3 e (2) (d) (iii) or a system specific study under subdivision B 3 e (2) (d) (iv) of this section.

((b)) If the owner has not taken TTHM and HAA5 samples under subdivision B 3 e (1) of this section or if the commissioner notifies the owner to comply with this subdivision, the owner shall conduct standard monitoring under subdivision B 3 e (2) (d) (iii) of this section or a system specific study under subdivision B 3 e (2) (d) (iv) of this section.

(e) LRAA compliance monitoring location recommendations.

(i) The IDSE report shall include recommendations and justification for where and during what month(s) TTHM and HAA5 monitoring in accordance with subdivision B 3 e (3) of this section should be conducted. These recommendations shall be based on the criteria in the paragraphs in this section.

(ii) Owners shall select the number of monitoring locations specified in the following table. These recommended locations will be used as LRAA routine compliance monitoring locations, unless the commissioner requires different or additional locations. The locations should be distributed throughout the distribution system to the extent possible.

Source Water Type	Population Size Category	Monitoring Frequency[1]	Distribution System Monitoring Location			
			Total per monitoring period[2]	Highest TTHM Locations	Highest HAA5 Locations	Existing Compliance Locations in accordance with subdivision B 3 e (1)
Surface water or ground-water	Less than 500	per year	2	1	1	
	500-3,300	per quarter	2	1	1	
	3,301-9,999	per quarter	2	1	1	

under the direct influence of surface water	10,000-49,999	per quarter	4	2	1	1
	50,000-249,999	per quarter	8	3	3	2
	250,000-999,999	per quarter	12	5	4	3
	1,000,000-4,999,999	per quarter	16	6	6	4
	Equal to or greater than 5,000,000	per quarter	20	8	7	5
Ground-water	Less than 500	per year	2	1	1	
	500-9,999	per year	2	1	1	
	10,000-99,999	per quarter	4	2	1	1
	100,000-499,999	per quarter	6	3	2	1
	Equal to or greater than 500,000	per quarter	8	3	3	2

[1]All owners shall monitor during month of highest DBP concentrations.

[2]Owners of waterworks on quarterly monitoring (except for surface water source or GUDI source waterworks serving 500-3,300) shall take dual sample sets every 90 days at each monitoring location. Groundwater source waterworks serving 500-9,999 (on annual monitoring) shall take dual sample sets annually at each monitoring location. Waterworks serving fewer than 500 and surface water source or GUDI source waterworks serving 500-3,300 shall take individual TTHM and HAA5 samples (instead of a dual sample set) at the locations with the highest TTHM and HAA5 concentrations, respectively. Waterworks serving fewer than 500 shall sample annually and surface water source or GUDI source systems serving 500-3,300 shall sample every 90 days. Only one location with a dual sample set per monitoring period is needed if highest TTHM and HAA5 concentrations occur at the same location (and month, if monitoring annually).

(iii) Owners shall recommend LRRA compliance monitoring locations based on standard monitoring results, system specific study results, and compliance monitoring results under subdivision B 3 e (1) of this section. Owners shall follow the protocol in subdivision B 3 e (2) (e) (iii) ((a)) through ((h)) of this section. If required to monitor at more than eight locations, the owner shall repeat the protocol as necessary. If a owner does not have existing compliance monitoring results under subdivision B 3 e (1) of this section or if the owner does not have enough existing compliance monitoring results under subdivision B 3 e (1) of this section, the owner shall repeat the protocol, skipping the provisions of subdivision B 3 e (2) (e) (iii) ((c)) and ((g)) of this section as necessary, until the owner has identified the required total number of monitoring locations.

((a)) Location with the highest TTHM LRAA not previously selected as a LRAA monitoring location.

((b)) Location with the highest HAA5 LRAA not previously selected as a LRAA monitoring location.

((c)) Existing average residence time compliance monitoring location under subdivision B 3 e (1) of this section (maximum residence time compliance monitoring location for ground water systems) with the highest HAA5 LRAA not previously selected as a LRAA monitoring location.

((d)) Location with the highest TTHM LRAA not previously selected as a LRAA monitoring location.

((e)) Location with the highest TTHM LRAA not previously selected as a LRAA monitoring location.

((f)) Location with the highest HAA5 LRAA not previously selected as a LRAA monitoring location.

((g)) Existing average residence time compliance monitoring location under subdivision B 3 e (1) of this section (maximum residence time compliance monitoring location for ground water systems) with the highest TTHM LRAA not previously selected as a LRAA monitoring location.

((h)) Location with the highest HAA5 LRAA not previously selected as a LRAA monitoring location.

(iv) An owner may recommend locations other than those specified in subdivision B 3 e (2) (e) (iii) of this section if the owner includes a rationale for selecting other locations. If the commissioner approves the alternate locations, the owners shall monitor at these locations to determine compliance under subdivision B 3 e (3) of this section.

(v) The recommended schedule shall include LRAA monitoring during the peak historical month for TTHM and HAA5 concentration, unless the commissioner approves another month. Once the owner has identified the peak historical month, and if the owner is required to conduct routine monitoring at least quarterly, the owner shall schedule LRAA compliance monitoring at a regular frequency of every 90 days or fewer.

(f) The owner shall use only the analytical methods specified in 12VAC5-590-440, or otherwise approved by EPA for monitoring, to demonstrate compliance.

(g) IDSE results will not be used for the purpose of determining compliance with MCLs in Table 2.13.

(3) Locational running annual average monitoring requirements.

(a) This subdivision establishes monitoring and other requirements for achieving compliance with maximum contaminant levels based on locational running annual averages (LRAA) for total trihalomethanes (TTHM) and haloacetic acids (five) (HAA5), and for achieving compliance with maximum residual disinfectant residuals for chlorine and chloramines for certain consecutive ~~systems~~ waterworks.

(b) This subdivision applies to community waterworks or nontransient noncommunity waterworks that uses a primary or residual disinfectant other than ultraviolet light or delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light.

(c) Owner shall comply on the schedule in the following table based on the type of waterworks:

Type of Waterworks	Waterworks shall comply with Locational Running Average monitoring by:[1]
Waterworks that are not part of a combined distribution system and waterworks that serve the largest population in the combined distribution system	
Waterworks serving equal to or greater than 100,000	April 1, 2012
Waterworks serving 50,000-99,999	October 1, 2012
Waterworks serving 10,000-49,999	October 1, 2013
Waterworks serving less than 10,000	October 1, 2013 if no Cryptosporidium monitoring is required under 12VAC5-590-420 B 3 a (1) (c) or October 1, 2014 if Cryptosporidium monitoring is required under 12VAC5-590-420 B 3 a (1) (c)
Other waterworks that are part of a combined distribution system	
Consecutive waterworks or wholesale waterworks	-at the same time as the waterworks with the earliest compliance date in the combined distribution system

[1]The commissioner may grant up to an additional 24 months for compliance with MCLs and operational evaluation levels if the waterworks require capital improvements to comply with an MCL.

(i) Waterworks monitoring frequency is specified in subdivision B 3 e (3) (d) (ii) of this section.

((a)) Owners of waterworks required to conduct quarterly monitoring shall begin monitoring in the first full calendar quarter that includes the compliance date in the table in subdivision B 3 e (3) (c) of this section.

((b)) Owners of waterworks required to conduct monitoring at a frequency that is less than quarterly shall begin monitoring in the calendar month recommended in the IDSE report prepared under subdivision B 3 e (2) (d) (iii) or subdivision B 3 e (2) (d) (iv) of this section or the calendar month identified in the LRAA monitoring plan developed under subdivision B 3 e (3) (e) of this section no later than 12 months after the compliance date in the table in subdivision B 3 e (3) (c) of this section.

(ii) Owners of waterworks required to conduct quarterly monitoring shall make compliance calculations at the end of the fourth calendar quarter that follows the compliance date and at the end of each subsequent quarter (or earlier if the LRAA calculated based on fewer than four quarters of data would cause the MCL to be exceeded regardless of the monitoring results of subsequent quarters). Owners of waterworks required to conduct monitoring at a frequency that is less than quarterly shall make compliance calculations beginning with the first compliance sample taken after the compliance date.

(iii) For the purpose of the schedule in subdivision B 3 e (3) (c) of this section, the commissioner has determine that the combined distribution system does not include consecutive waterworks that receive water from a wholesale waterworks only on an emergency basis or receive less than 10% of their total water consumption from a wholesale waterworks. The commissioner has also determine that the combined distribution system does not include wholesale waterworks which deliver water to a consecutive waterworks only on an emergency basis or deliver less than 10% of the total water used by a consecutive waterworks.

(d) Routine monitoring.

(i) Owners submitting an IDSE report shall begin monitoring at the locations and months the owner

recommended in the IDSE report submitted under subdivision B 3 e (2) (e) of this section following the schedule in subdivision B 3 e (3) (c) of this section, unless the commissioner requires other locations or additional locations after review. If the owner submitted a 40/30 certification under subdivision B 3 e (2) (d) (v) of this section or the waterworks qualified for a very small system waiver under subdivision B 3 e (2) (d) (vi) of this section or the waterworks is a nontransient noncommunity waterworks serving less than 10,000, the owner shall monitor at the location(s) and dates identified in the monitoring plan in subdivision B 3 j of this section, updated as required by subdivision B 3 e (3) (e) of this section.

(ii) Owners shall monitor at no fewer than the number of locations identified in the following table:

Source Water Type	Population Size Category	Monitoring Frequency[1]	Distribution System Monitoring Location Total per Monitoring Period[2]
Surface water or groundwater under the direct influence of surface water	Less than 500	per year	2
	500-3,300	per quarter	2
	3,301-9,999	per quarter	2
	10,000-49,999	per quarter	4
	50,000-249,999	per quarter	8
	250,000-999,999	per quarter	12
	1,000,000-4,999,999	per quarter	16
	Equal to or greater than 5,000,000	per quarter	20
Groundwater	Less than 500	per year	2
	500-9,999	per year	2
	10,000-99,999	per quarter	4
	100,000-499,999	per quarter	6
	Equal to or greater than 500,000	per quarter	8

[1]All owners shall monitor during month of highest DBP concentrations.

[2]Owners of waterworks on quarterly monitoring (except for surface water source or GUDI source waterworks serving 500-3,300) shall take dual sample sets every 90 days at each monitoring location. Groundwater source waterworks serving 500-9,999 (on annual monitoring) shall take dual sample sets annually at each monitoring location. Waterworks serving fewer than 500 and surface water source or GUDI source waterworks serving 500-3,300 shall take individual TTHM and HAA5 samples (instead of a dual sample set) at the locations with the highest TTHM and HAA5 concentrations, respectively. Waterworks serving fewer than 500 shall sample annually and surface water source or GUDI source systems serving 500-3,300 shall sample every 90 days. Only one location with a dual sample set per monitoring period is needed if highest TTHM and HAA5 concentrations occur at the same location (and month, if monitoring annually).

(iii) Owners of waterworks not using disinfection that begin using a disinfectant other than UV light after the dates in subdivision B 3 e (2) of this section for complying with the IDSE requirements shall consult with the commissioner to identify compliance monitoring locations. Owners shall then develop a monitoring plan under subdivision B 3 e (3) (e) of this section that includes those monitoring locations.

(iv) Owners shall use an approved method listed in 12VAC5-590-440 for TTHM and HAA5 analyses. Analyses shall be conducted by laboratories that have received certification by EPA or ~~the state~~ DCLS as specified in 12VAC5-590-440.

(e) Monitoring plan.

(i) Owners shall develop and implement a monitoring plan to be kept on file for review by the commissioner and the public. The monitoring plan shall be completed no later than the date the owner conducts the initial monitoring and contain:

((a)) Monitoring locations;

((b)) Monitoring dates; and

((c)) Compliance calculation procedures.

(ii) If the owner was not required to submit an IDSE report under either subdivision B 3 e (2) (d) (iii) or subdivision B 3 e (2) (d) (iv) of this section, and the waterworks did not have sufficient monitoring locations under subdivision B 3 e (1) of this section to identify the

required number of LRAA compliance monitoring locations indicated in subdivision B 3 e (2) (e) (ii) of this section, the owner shall identify additional locations by alternating selection of locations representing high TTHM levels and high HAA5 levels until the required number of compliance monitoring locations have been identified. The owner shall also provide the rationale for identifying the locations as having high levels of TTHM or HAA5. If the waterworks has more monitoring locations under subdivision B 3 e (1) of this section than required for LRAA compliance monitoring in subdivision B 3 e (2) (e) (ii) of this section, the owner shall identify which locations the waterworks will use for LRAA compliance monitoring by alternating selection of locations representing high TTHM levels and high HAA5 levels until the required number of LRAA compliance monitoring locations have been identified.

(iii) Owners of waterworks using surface water or groundwater under the direct influence of surface water serving more than 3,300 people shall submit a copy of the monitoring plan to the commissioner prior to the date the waterworks conducts the initial monitoring, unless the IDSE report submitted under subdivision B 3 e (2) of this section contains all the information required by this section.

(iv) Owners may revise the monitoring plan to reflect changes in treatment, distribution system operations and layout (including new service areas), or other factors that may affect TTHM or HAA5 formation, or for reasons approved by the commissioner, after consultation with the commissioner regarding the need for changes and the appropriateness of the changes. If the owner changes monitoring locations, the owner shall replace existing compliance monitoring locations with the lowest LRAA with new locations that reflect the current distribution system locations with expected high TTHM or HAA5 levels. The commissioner may also require modifications in the monitoring plan. Owners of waterworks using surface water or groundwater under the direct influence of surface water serving more than 3,300 people shall submit a copy of the modified monitoring plan to the commissioner prior to the date the owner is required to comply with the revised monitoring plan.

(f) Reduced monitoring

(i) Owners may reduce monitoring to the level specified in the following table any time the LRAA is less than or equal to 0.040 mg/L for TTHM and less than or equal to 0.030 mg/L for HAA5 at all monitoring locations. Owners may only use data collected under the provisions of this subdivision or subdivision B 3 e (1) of this section to qualify for reduced monitoring. In addition, the source water annual average TOC level, before any treatment, shall be less than or equal to 4.0 mg/L at each treatment plant treating surface water or ground water under the direct influence of surface water, based on monitoring conducted under either subdivision B 3 e (1) (b) (vi) or B 3 i of this section.

Source Water Type	Population Size Category	Monitoring Frequency[1]	Distribution System Monitoring Location per Monitoring Period
Surface water or ground-water under the direct influence of surface water	Less than 500		monitoring may not be reduced
	500-3,300	per year	1 TTHM and 1 HAA5 sample: one at the location and during the quarter with the highest TTHM single measurement, one at the location and during the quarter with the highest HAA5 single measurement; 1 dual sample set per year if the highest TTHM and HAA5 measurements occurred at the same location and quarter.
	3,301-9,999	per year	2 dual sample sets: one at the location and during the quarter with the highest TTHM single measurement, one at the location and during the quarter with the highest HAA5 single measurement
	10,000-49,999	per quarter	2 dual sample sets at the locations with the highest TTHM and highest HAA5 LRAAs
	50,000-249,999	per quarter	4 dual sample sets - at the locations with the two highest TTHM and two highest HAA5 LRAAs
	250,000-999,999	per quarter	6 dual sample sets - at the locations with the three highest TTHM and three highest HAA5 LRAAs

Source Water Type	Population Size Category	Monitoring Frequency[1]	Distribution System Monitoring Location per Monitoring Period
	1,000,000-4,999,999	per quarter	8 dual sample sets - at the locations with the four highest TTHM and four highest HAA5 LRAAs
	Equal to or greater than 5,000,000	per quarter	10 dual sample sets - at the locations with the five highest TTHM and five highest HAA5 LRAAs
Groundwater	Less than 500	every third year	1 TTHM and 1 HAA5 sample: one at the location and during the quarter with the highest TTHM single measurement, one at the location and during the quarter with the highest HAA5 single measurement; 1 dual sample set per year if the highest TTHM and HAA5 measurements occurred at the same location and quarter.
	500-9,999	per year	1 TTHM and 1 HAA5 sample: one at the location and during the quarter with the highest TTHM single measurement, one at the location and during the quarter with the highest HAA5 single measurement; 1 dual sample set per year if the highest TTHM and HAA5 measurements occurred at the same location and quarter.
	10,000-99,999	per year	2 dual sample sets: one at the location and during the quarter with the highest TTHM single measurement, one at the location and during the quarter with the highest HAA5 single measurement
	100,000-499,999	per quarter	2 dual sample sets; at the locations with the highest TTHM and highest HAA5 LRAAs
	Equal to or greater than 500,000	per quarter	4 dual sample sets at the locations with the two highest TTHM and two highest HAA5 LRAAs

[1]Owners of waterworks on quarterly monitoring shall take dual sample sets every 90 days.

(ii) owners may remain on reduced monitoring as long as the TTHM LRAA is less than or equal to 0.040 mg/L and the HAA5 LRAA is less than or equal to 0.030 mg/L at each monitoring location (for waterworks with quarterly reduced monitoring) or each TTHM sample is less than or equal to 0.060 mg/L and each HAA5 sample is less than or equal to 0.045 mg/L (for waterworks with annual or less frequent monitoring). In addition, the source water annual average TOC level, before any treatment, shall be less than or equal to 4.0 mg/L at each treatment plant treating surface water or ground water under the direct influence of surface water, based on monitoring conducted under either subdivision B 3 e (1) (b) (vi) or B 3 i of this section.

(iii) If the LRAA based on quarterly monitoring at any monitoring location exceeds either 0.040 mg/L for TTHM or 0.030 mg/L for HAA5 or if the annual (or less frequent) sample at any location exceeds either 0.060 mg/L for TTHM or 0.045 mg/L for HAA5, or if the source water annual average TOC level, before any treatment, is greater than 4.0 mg/L at any treatment plant treating surface water or ground water under the direct influence of surface water, the owner shall resume routine monitoring under subdivision B 3 e (3) (d) of this section or begin increased monitoring if subdivision B 3 e (3) (g) of this section applies.

(iv) The commissioner may return the waterworks to routine monitoring at the commissioner's discretion.

(v) A waterworks may remain on reduced monitoring after the dates identified in subdivision B 3 e (3) (c) of this section for compliance with this section only if the waterworks qualifies for a 40/30 certification under subdivision B 3 e (2) (d) (v) of this section or has received a very small system waiver under subdivision B 3 e (2) (d) (vi) of this section, plus the waterworks meets the reduced monitoring criteria in subdivision B 3 e (3) (f) of this section, and the owner did not change or add monitoring locations from those used for compliance monitoring under subdivision B 3 e (1) of this section. If the monitoring locations under this subdivision differ

from the monitoring locations under subdivision B 3 e (1) of this section, the owner may not remain on reduced monitoring after the dates identified in subdivision B 3 e (3) (c) of this section for compliance with this subdivision.

(vi) Owners shall use an approved method listed in 12VAC5-590-440 for TTHM and HAA5 analyses. Analyses shall be conducted by laboratories that have received certification by EPA or DCLS as specified in 12VAC5-590-440.

(g) Increased Monitoring

(i) Owners of waterworks required to monitor at a particular location annually or less frequently than annually under subdivision B 3 e (3) (d) or subdivision B 3 e (3) (f) of this section, shall increase monitoring to dual sample sets once per quarter (taken every 90 days) at all locations if a TTHM sample is greater than 0.080 mg/L or a HAA5 sample is greater than 0.060 mg/L at any location.

(ii) A waterworks is in violation of the MCL when the LRAA exceeds the MCLs in Table 2.13, calculated based on four consecutive quarters of monitoring (or the LRAA calculated based on fewer than four quarters of data if the MCL would be exceeded regardless of the monitoring results of subsequent quarters). Waterworks are in violation of the monitoring requirements for each quarter that a monitoring result would be used in calculating an LRAA if the owner fails to monitor.

(iii) Owners may return to routine monitoring once the waterworks has conducted increased monitoring for at least four consecutive quarters and the LRAA for every monitoring location is less than or equal to 0.060 mg/L for TTHM and less than or equal to 0.045 mg/L for HAA5.

(iv) Owners of waterworks on increased monitoring under subdivision e (1) in this section shall remain on increased monitoring until the waterworks qualify for a return to routine monitoring under subdivision B 3 e (3) (g) (iii) of this section. The owner shall conduct increased monitoring under subdivision B 3 e (3) (g) of this section at the monitoring locations in the monitoring plan developed under subdivision B 3 e (3) (e) of this section beginning at the date identified in subdivision B 3 e (3) (c) of this section for compliance with this subdivision and remain on increased monitoring until the waterworks qualifies for a return to routine monitoring under subdivision B 3 e (3) (g) (iii) of this section.

(v) Owners shall use an approved method listed in 12VAC5-590-440 for TTHM and HAA5 analyses. Analyses shall be conducted by laboratories that have received certification by EPA or DCLS as specified in 12VAC5-590-440.

f. Chlorite. Owners of community and nontransient noncommunity waterworks using chlorine dioxide, for disinfection or oxidation, shall conduct monitoring for chlorite.

(1) Routine monitoring.

(a) Daily monitoring. Owners shall take daily samples at the entrance to the distribution system. For any daily sample that exceeds the chlorite PMCL in Table 2.13, the owner shall take additional samples in the distribution system the following day at the locations required by subdivision B 3 f (1) (c) of this section, in addition to the sample required at the entrance to the distribution system.

(b) Monthly monitoring. Owners shall take a three-sample set each month in the distribution system. The owner shall take one sample at each of the following locations: near the first customer, at a location representative of average residence time, and at a location reflecting maximum residence time in the distribution system. Any additional routine sampling shall be conducted in the same manner (as three-sample sets, at the specified locations). The owner may use the results of additional monitoring conducted under subdivision B 3 f (1) (c) of this section to meet the requirement for monitoring in this paragraph.

(c) Additional monitoring requirements. On each day following a routine sample monitoring result that exceeds the chlorite PMCL in Table 2.13 at the entrance to the distribution system, the owner is required to take three chlorite distribution system samples at the following locations: as close to the first customer as possible, in a location representative of average residence time, and as close to the end of the distribution system as possible (reflecting maximum residence time in the distribution system).

(2) Reduced monitoring.

(a) Chlorite monitoring at the entrance to the distribution system required by subdivision B 3 f (1) (a) of this section may not be reduced.

(b) Chlorite monitoring in the distribution system required by subdivision B 3 f (1) (b) of this section may be reduced to one three-sample set per quarter after one year of monitoring where no individual chlorite sample taken in the distribution system under subdivision B 3 f (1) (b) of this section has exceeded the chlorite PMCL in Table 2.13 and the owner has not been required to conduct monitoring under subdivision B 3 f (1) (c) of this section. The owner may remain on the reduced monitoring schedule until either any of the three individual chlorite samples taken quarterly in the distribution system under subdivision B 3 f (1) (b) of this section exceeds the chlorite PMCL or the owner is

required to conduct monitoring under subdivision B 3 f (1) (c) of this section, at which time the owner shall revert to routine monitoring.

g. Bromate.

(1) The owner of a community or nontransient noncommunity waterworks treatment plant using ozone, for disinfection or oxidation, shall take one sample per month and analyze it for bromate. The owner shall take samples monthly at the entrance to the distribution system while the ozonation system is operating under normal conditions.

(2) Reduced monitoring.

(a) Until March 31, 2009, owners of waterworks required to analyze for bromate may reduce monitoring from monthly to quarterly, if the waterworks average source water bromide concentration is less than 0.05 mg/L based on representative monthly bromide measurements for one year. The owner may remain on reduced bromate monitoring until the running annual average source water bromide concentration, computed quarterly, is equal to or greater than 0.05 mg/L based on representative monthly measurements. If the running annual average source water bromide concentration is equal to or greater than 0.05 mg/L, the owner shall resume routine monitoring required by subdivision B 3 g (1) of this section in the following month.

(b) Beginning April 1, 2009, owners may no longer use the provisions of subdivision B 3 g (2) (a) of this section to qualify for reduced monitoring. An owner required to analyze for bromate may reduce monitoring from monthly to quarterly, if the waterworks running annual average bromate concentration is equal to or less than 0.0025 mg/L based on monthly bromate measurements under subdivision B 3 g (1) of this section for the most recent four quarters, with samples analyzed in accordance with 12VAC5-590-440. If a waterworks has qualified for reduced bromate monitoring under subdivision B 3 g (2) (a) of this section, the owner may remain on reduced monitoring as long as the running annual average of quarterly bromate samples is equal to or less than 0.0025 mg/L based on samples analyzed in accordance with 12VAC5-590-440. If the running annual average bromate concentration is greater than 0.0025 mg/L, the owner shall resume routine monitoring required by subdivision B 3 g (1) of this section.

(3) Bromide. Owners of waterworks required to analyze for bromate may reduce bromate monitoring from monthly to once per quarter, if the owner demonstrates that the average source water bromide concentration is less than 0.05 mg/L based upon representative monthly measurements for one year. The owner shall continue bromide monitoring to remain on reduced bromate monitoring.

h. Monitoring requirements for disinfectant residuals.

(1) Chlorine and chloramines.

(a) Owners of waterworks that use chlorine or chloramines shall measure the residual disinfectant level in the distribution system at the same point in the distribution system and at the same time as total coliforms are sampled, as specified in subsection A. Owners of waterworks that use surface water or groundwater under the direct influence of surface water may use the results of residual disinfectant concentration sampling found in subdivision B 7 c (1) of this section in lieu of taking separate samples.

(b) Residual disinfectant level monitoring may not be reduced.

(2) Chlorine dioxide.

(a) Owners of waterworks that use chlorine dioxide for disinfection or oxidation shall take daily samples at the entrance to the distribution system. For any daily sample that exceeds the MRDL in Table 2.12, the owner shall take samples in the distribution system the following day at the locations required by subdivision B 3 h (2) (b) of this section, in addition to the sample required at the entrance to the distribution system.

(b) On each day following a routine sample monitoring result that exceeds the MRDL in Table 2.12, the owner is required to take three chlorine dioxide distribution system samples. If chlorine dioxide or chloramines are used to maintain a disinfectant residual in the distribution system, or if chlorine is used to maintain a disinfectant residual in the distribution system and there are no disinfection addition points after the entrance to the distribution system (i.e., no booster chlorination), the owner shall take three samples as close to the first customer as possible, at intervals of at least six hours. If chlorine is used to maintain a disinfectant residual in the distribution system and there are one or more disinfection addition points after the entrance to the distribution system (i.e., booster chlorination), the owner shall take one sample at each of the following locations: as close to the first customer as possible, in a location representative of average residence time, and as close to the end of the distribution system as possible (reflecting maximum residence time in the distribution system).

(c) Chlorine dioxide monitoring may not be reduced.

i. Monitoring requirements for disinfection byproduct precursors (DBPP).

(1) Owners of community or nontransient noncommunity waterworks using surface water or groundwater under the

direct influence of surface water and using conventional filtration treatment (as defined in 12VAC5-590-10) shall monitor each treatment plant for TOC no later than the point of combined filter effluent turbidity monitoring and representative of the treated water. All owners required to monitor under subdivision (B 3 i (1)) shall also monitor for TOC in the source water prior to any treatment at the same time as monitoring for TOC in the treated water. These samples (source water and treated water) are referred to as paired samples. At the same time as the source water sample is taken, all owners shall monitor for alkalinity in the source water prior to any treatment. Owners shall take one paired sample and one source water alkalinity sample per month per plant at a time representative of normal operating conditions and influent water quality.

(2) Owners of community or nontransient noncommunity waterworks that use surface water or groundwater under the direct influence of surface water with an average treated water TOC of less than 2.0 mg/L for two consecutive years, or less than 1.0 mg/L for one year, may reduce monitoring for both TOC and alkalinity to one paired sample and one source water alkalinity sample per plant per quarter. The owners shall revert to routine monitoring in the month following the quarter when the annual average treated water TOC equal to or greater than 2.0 mg/L.

j. The owner of each waterworks required to monitor under subdivision B 3 of this section shall develop and implement a monitoring plan. The owner shall maintain the plan and make it available for inspection by the commissioner and the general public no later than 30 days following the applicable compliance dates in subdivision B 3 a of this section. The owners of all community or nontransient noncommunity waterworks that use surface water or groundwater under the direct influence of surface water serving more than 3,300 people shall submit a copy of the monitoring plan to the commissioner no later than the date of the first report required under 12VAC5-590-530 A. The commissioner may also require the plan to be submitted by any other owner. After review, the commissioner may require changes in any plan elements. The plan shall include at least the following elements:

(1) Specific locations and schedules for collecting samples for any parameters included in subdivision B 3 of this section.

(2) How the owner will calculate compliance with PMCLs, MRDLs, and treatment techniques.

(3) The sampling plan for a consecutive waterworks shall reflect the entire consecutive distribution system.

4. Unregulated contaminants (UCs). Owners of all community and nontransient noncommunity waterworks shall sample for the contaminants listed in Table 2.6 and Table 2.7 as follows:

a. Table 2.6—Group A

(1) Owners of waterworks that use a surface water source in whole or in part shall sample at the entry points to the distribution system which is representative of each source, after treatment (hereafter called a sampling point). The minimum number of samples is one year of consecutive quarterly samples per sampling point beginning in accordance with Table 2.8.

(2) Owners of waterworks that use groundwater shall sample at points of entry to the distribution system which is representative of each source (hereafter called a sampling point). The minimum number of samples is one sample per sampling point beginning in accordance with Table 2.8.

(3) The commissioner may require a confirmation sample for positive or negative results.

(4) Owners of waterworks serving less than 150 connections may inform the commissioner, in writing, that their waterworks is available for sampling instead of performing the required sampling.

(5) All waterworks required to sample under this section shall repeat the sampling at least every five years.

b. Table 2.6—Group B and Table 2.7

(1) The owner of each community and nontransient noncommunity waterworks shall take four consecutive quarterly samples at the entry points to the distribution system which is representative of each source (hereafter called a sampling point) for each contaminant listed in Table 2.6 Group B and report the results to the commissioner. Monitoring shall be completed by December 31, 1995.

(2) The owner of each community and nontransient noncommunity waterworks shall take one sample at each sampling point for each contaminant listed in Table 2.7 and report the results to the commissioner. Monitoring shall be completed by December 31, 1995.

(3) The owner of each community and nontransient noncommunity waterworks may apply to the commissioner for a waiver from the monitoring requirements of subdivisions B 4 b (1) and (2) of this section for the contaminants listed in Table 2.6 Group B and Table 2.7.

(4) The commissioner may grant a waiver for the requirement of subdivision B 4 b (1) of this section based on the criteria specified in subdivision B 2 f of this section. The commissioner may grant a waiver from the

requirement of subdivision B 4 b (2) of this section if previous analytical results indicate contamination would not occur, provided this data was collected after January 1, 1990.

(5) If the waterworks utilizes more than one source and the sources are combined before distribution, the owner shall sample at an entry point to the distribution system during periods of normal operating conditions (i.e., when water is representative of all sources being used).

(6) The commissioner may require a confirmation sample for positive or negative results.

(7) Instead of performing the monitoring required by this section, the owner of a community waterworks or nontransient noncommunity waterworks serving fewer than 150 service connections may send a letter to the commissioner stating that the waterworks is available for sampling. This letter shall be sent to the commissioner by January 1, 1994. The owner shall not send such samples to the commissioner unless requested to do so by the commissioner.

(8) All waterworks required to sample under this subdivision shall repeat the sampling at least every five years.

5. Reserved.

6. Reserved.

7. Monitoring filtration and disinfection.

a. The owner of a waterworks that uses a surface water source or a groundwater source under the direct influence of surface water and provides filtration treatment shall monitor in accordance with this section beginning June 29, 1993, or when filtration is installed, whichever is later.

b. Turbidity measurements as required by 12VAC5-590-370 C shall be performed on representative samples of the filtered water every four hours (or more frequently) that the waterworks serves water to the public. An owner may substitute continuous turbidity monitoring for grab sample monitoring if it validates the continuous measurement for accuracy on a regular basis using a protocol approved by the commissioner. For any waterworks using slow sand filtration or filtration treatment other than conventional treatment, direct filtration, or diatomaceous earth filtration, the office may reduce the sampling frequency to once per day if it determines that less frequent monitoring is sufficient to indicate effective filtration performance. For waterworks serving 500 or fewer persons, the commissioner may reduce the turbidity sampling frequency to once per day, regardless of the type of filtration treatment used, if the commissioner determines that less frequent monitoring is sufficient to indicate effective filtration performance.

(1) In addition to the above, as of January 1, 2001, waterworks serving at least 10,000 people and as of January 1, 2005, waterworks serving less than 10,000 people supplied by surface water or groundwater under the direct influence of surface water using conventional filtration treatment or direct filtration shall conduct continuous monitoring of turbidity for each individual filter, using an approved method in 12VAC5-590-440. The turbidimeter shall be calibrated using the procedure specified by the manufacturer. The owner shall record the results of individual filter turbidity monitoring every 15 minutes.

(2) If there is a failure in the continuous turbidity monitoring equipment, the owner shall conduct grab sampling every four hours in lieu of continuous monitoring but for no more than five working days (for waterworks serving at least 10,000 people) or 14 days (for waterworks serving less than 10,000 people) following the failure of the equipment.

(3) If a waterworks serving less than 10,000 people consists of two or fewer filters, continuous monitoring of the combined filter effluent may be used in lieu of individual filter monitoring.

c. The residual disinfectant concentration of the water entering the distribution system shall be monitored continuously, and the lowest value shall be recorded each day, except that if there is a failure in the continuous monitoring equipment, grab sampling every four hours may be conducted in lieu of continuous monitoring, but for no more than five working days following the failure of the equipment, and owners of waterworks serving 3,300 or fewer persons may take grab samples in lieu of continuous monitoring on an ongoing basis at the frequencies each day prescribed below:

Table 2.5
Grab Sample Monitoring Frequency

Waterworks Size By Population	Samples/Day[1]
500 or less	1
501 to 1,000	2
1,000 to 2,500	3
2,501 to 3,300	4

[1]The day's samples cannot be taken at the same time. The sampling intervals are subject to commissioner's review and approval. If at any time the residual disinfectant concentration falls below 0.2 mg/L in a waterworks using grab sampling in lieu of continuous monitoring, the waterworks owner shall take a grab sample every four hours until the residual disinfectant concentration is equal to or greater than 0.2 mg/L.

(1) The residual disinfectant concentration shall be measured at least at the same points in the distribution

system and at the same time as total coliforms are sampled, as specified in subsection A of this section, except that the district engineer may allow an owner which uses both a surface water source or a groundwater source under direct influence of surface water, and a groundwater source to take disinfectant residual samples at points other than the total coliform sampling points if the division determines that such points are more representative of treated (disinfected) water quality within the distribution system. Heterotrophic bacteria, measured as heterotrophic plate count (HPC) as specified in 12VAC5-590-420 B may be measured in lieu of residual disinfectant concentration.

(2) If the commissioner determines, based on site-specific considerations, that a waterworks has no means for having a sample transported and analyzed for HPC by a certified laboratory under the requisite time and temperature conditions and that the waterworks is providing adequate disinfection in the distribution system, the requirements of subdivision B 7 (1) of this section do not apply to that waterworks.

d. The following information on the samples taken in the distribution system in conjunction with total coliform monitoring pursuant to 12VAC5-590-420 B shall be reported monthly to the district engineer by the owner:

(1) Number of instances where the residual disinfectant concentration is measured;

(2) Number of instances where the residual disinfectant concentration is not measured but HPC is measured;

(3) Number of instances where the residual disinfectant concentration is measured but not detected and no HPC is measured;

(4) Number of instances where no residual disinfectant concentration is detected and where the HPC is greater than 500/mL;

(5) Number of instances where the residual disinfectant concentration is not measured and HPC is greater than 500/mL.

(6) For the current and previous month the waterworks serves water to the public, the value of "V" in percent in the following formula:

$V = (c + d + e) / (a + b) \times 100$

where

a = the value in subdivision B 7 d (1) of this section,

b = the value in subdivision B 7 d (2) of this section,

c = the value in subdivision B 7 d (3) of this section,

d = the value in subdivision B 7 d (4) of this section,

e = the value in subdivision B 7 d (5) of this section,

(7) If the commissioner determines, based on site-specific considerations, that an owner has no means for having a sample transported and analyzed for HPC by a certified laboratory within the requisite time and temperature conditions and that the waterworks is providing adequate disinfection in the distribution system, the requirements of subdivision B 7 c (1) of this section do not apply.

e. An owner need not report the data listed in 12VAC5-590-530 C 2 a if all data listed in 12VAC5-590-530 C 2 a through c remain on file at the waterworks and the district engineer determines that the owner has submitted all the information required by 12VAC5-590-530 C 2 a through c for at least 12 months.

8. Operational. Owners may be required by the commissioner to collect additional samples to provide quality control for any treatment processes that are employed.

C. Physical. All samples for turbidity analysis shall be taken at a representative entry point or points to the water distribution system unless otherwise specified. Turbidity samples shall be analyzed in accordance with 12VAC5-590-480 B 1 a, at least once per day at all waterworks that use surface water sources or groundwater sources under the direct influence of surface water.

D. Radiological. The location of sampling points, the radionuclides measured in community waterworks, the frequency, and the timing of sampling within each compliance period shall be established or approved by the commissioner. The commissioner may increase required monitoring where necessary to detect variations within the waterworks. Failure to comply with the sampling schedules in this section will require public notification pursuant to 12VAC5-590-540.

Community waterworks owners shall conduct monitoring to determine compliance with the PMCLs in Table 2.5 and 12VAC5-590-400 in accordance with this section.

1. Monitoring and compliance requirements for gross alpha particle activity, radium-226, radium-228, and uranium.

a. Community waterworks owners shall conduct initial monitoring to determine compliance with 12VAC5-590-400 B 2, 12VAC5-590-400 B 3 and 12VAC5-590-400 B 4 by December 31, 2007. For the purposes of monitoring for gross alpha particle activity, radium-226, radium-228, uranium, and beta particle and photon radioactivity in drinking water, "detection limit" is defined as in Appendix B of this chapter.

(1) Applicability and sampling location for existing community waterworks or sources. The owners of all existing community waterworks using ground water, surface water or waterworks using both ground and

surface water shall sample at every entry point to the distribution system that is representative of all sources being used under normal operating conditions. The community waterworks owner shall take each sample at the same entry point unless conditions make another sampling point more representative of each source.

(2) Applicability and sampling location for new community waterworks or sources. All new community waterworks or community waterworks that use a new source of water shall begin to conduct initial monitoring for the new source within the first quarter after initiating use of the source. Community waterworks owners shall conduct more frequent monitoring when directed by the commissioner in the event of possible contamination or when changes in the distribution system or treatment processes occur which may increase the concentration of radioactivity in finished water.

b. Initial monitoring: Community waterworks owners shall conduct initial monitoring for gross alpha particle activity, radium-226, radium-228, and uranium as follows:

(1) Community waterworks without acceptable historical data, as defined below, shall collect four consecutive quarterly samples at all entry points before December 31, 2007.

(2) Grandfathering of data: The commissioner may allow historical monitoring data collected at an entry point to satisfy the initial monitoring requirements for that entry point, for the following situations:

(a) To satisfy initial monitoring requirements, a community waterworks owner having only one entry point to the distribution system may use the monitoring data from the last compliance monitoring period that began between June 2000 and December 8, 2003.

(b) To satisfy initial monitoring requirements, a community waterworks owner with multiple entry points and having appropriate historical monitoring data for each entry point to the distribution system may use the monitoring data from the last compliance monitoring period that began between June 2000 and December 8, 2003.

(3) For gross alpha particle activity, uranium, radium-226, and radium-228 monitoring, the commissioner may waive the final two quarters of initial monitoring for an entry point if the results of the samples from the previous two quarters are below the method detection limit specified in Appendix B.

(4) If the average of the initial monitoring results for an entry point is above the PMCL, the community waterworks owner shall collect and analyze quarterly samples at that entry point until the owner has results from four consecutive quarters that are at or below the PMCL, unless the community waterworks owner enters into another schedule as part of a formal compliance agreement with the commissioner.

c. Reduced monitoring: The commissioner may allow community waterworks owners to reduce the future frequency of monitoring from once every three years to once every six or nine years at each entry point, based on the following criteria:

(1) If the average of the initial monitoring results for each contaminant (i.e., gross alpha particle activity, uranium, radium-226, or radium-228) is below the method detection limit specified in Appendix B, the community waterworks owner shall collect and analyze for that contaminant using at least one sample at that entry point every nine years.

(2) For gross alpha particle activity and uranium, if the average of the initial monitoring results for each contaminant is at or above the method detection limit specified in Appendix B but at or below 1/2 of the PMCL, the community waterworks owner shall collect and analyze for that contaminant using at least one sample at that entry point every six years. For combined radium-226 and radium-228, the analytical results shall be combined. If the average of the combined initial monitoring results for radium-226 and radium-228 is at or above the method detection limit specified in Appendix B but at or below 1/2 the PMCL, the community waterworks owner shall collect and analyze for that contaminant using at least one sample at that entry point every six years.

(3) For gross alpha particle activity and uranium, if the average of the initial monitoring results for each contaminant is above 1/2 the PMCL but at or below the PMCL, the community waterworks owner shall collect and analyze at least one sample at that entry point every three years. For combined radium-226 and radium-228, the analytical results shall be combined. If the average of the combined initial monitoring results for radium-226 and radium-228 is above 1/2 the PMCL but at or below the MPCL, the community waterworks owner shall collect and analyze at least one sample at that entry point every three years.

(4) Community waterworks owners shall use the samples collected during the reduced monitoring period to determine the monitoring frequency for subsequent monitoring periods (e.g., if a community waterworks' entry point is on a nine-year monitoring period, and the sample result is above 1/2 the PMCL, then the next monitoring period for that entry point is three years).

(5) If a community waterworks owner has a monitoring result that exceeds the PMCL while on reduced

monitoring, the community waterworks owner shall collect and analyze quarterly samples at that entry point until the community waterworks owner has results from four consecutive quarters that are below the PMCL, unless the community waterworks enters into another schedule as part of a formal compliance agreement with the commissioner.

d. Compositing: To fulfill quarterly monitoring requirements for gross alpha particle activity, radium-226, radium-228, or uranium, a community waterworks owner may composite up to four consecutive quarterly samples from a single entry point if analysis is done within a year of the first sample. The commissioner will treat analytical results from the composited sample as the average analytical result to determine compliance with the PMCLs and the future monitoring frequency. If the analytical result from the composited sample is greater than 1/2 the PMCL, the commissioner may direct the community waterworks owner to take additional quarterly samples before allowing the community waterworks owner to sample under a reduced monitoring schedule.

e. A gross alpha particle activity measurement may be substituted for the required radium-226 measurement provided that the measured gross alpha particle activity does not exceed 5 pCi/L. A gross alpha particle activity measurement may be substituted for the required uranium measurement provided that the measured gross alpha particle activity does not exceed 15 pCi/L.

The gross alpha measurement shall have a confidence interval of 95% (1.65, where is the standard deviation of the net counting rate of the sample) for radium-226 and uranium. When a community waterworks owner uses a gross alpha particle activity measurement in lieu of a radium-226 and/or uranium measurement, the gross alpha particle activity analytical result will be used to determine the future monitoring frequency for radium-226 and/or uranium. If the gross alpha particle activity result is less than the detection limit as specified in Appendix B, 1/2 the detection limit will be used to determine compliance and the future monitoring frequency.

2. Monitoring and compliance requirements for beta particle and photon radioactivity. To determine compliance with the maximum contaminant levels in 12VAC5-590-400 B 5 for beta particle and photon radioactivity, a community waterworks owner shall monitor at a frequency as follows:

a. Community waterworks owners (using surface or groundwater) designated by the commissioner as vulnerable shall sample for beta particle and photon radioactivity. Community waterworks owners shall collect quarterly samples for beta emitters and annual samples for tritium and strontium-90 at each entry point to the distribution system, beginning within one quarter after being notified by the commissioner. Community waterworks already designated by the commissioner shall continue to sample until the commissioner reviews and either reaffirms or removes the designation.

(1) If the gross beta particle activity minus the naturally occurring potassium-40 beta particle activity at an entry point has a running annual average (computed quarterly) less than or equal to 50 pCi/L (screening level), the commissioner may reduce the frequency of monitoring at that entry point to once every three years. Community waterworks owners shall collect all samples required in subdivision 2 a of this subsection during the reduced monitoring period.

(2) For community waterworks in the vicinity of a nuclear facility, the commissioner may allow the community waterworks owners to utilize environmental surveillance data collected by the nuclear facility in lieu of monitoring at the community waterworks' entry point(s), where the commissioner determines if such data is applicable to a particular community waterworks. In the event that there is a release from a nuclear facility, community waterworks owners which are using surveillance data shall begin monitoring at the community waterworks' entry point(s) in accordance with subdivision 2 a of this subsection.

b. Community waterworks owners (using surface or groundwater) designated by the commissioner as utilizing waters contaminated by effluents from nuclear facilities shall sample for beta particle and photon radioactivity. Community waterworks owners shall collect quarterly samples for beta emitters and iodine-131 and annual samples for tritium and strontium-90 at each entry point to the distribution system, beginning within one quarter after being notified by the commissioner. Owners of community waterworks already designated by the commissioner as using waters contaminated by effluents from nuclear facilities shall continue to sample until the commissioner reviews and either reaffirms or removes the designation.

(1) Quarterly monitoring for gross beta particle activity shall be based on the analysis of monthly samples or the analysis of a composite of three monthly samples. The former is recommended.

(2) For iodine-131, a composite of five consecutive daily samples shall be analyzed once each quarter. As directed by the commission, more frequent monitoring shall be conducted when iodine-131 is identified in the finished water.

(3) Annual monitoring for strontium-90 and tritium shall be conducted by means of the analysis of a composite of

four consecutive quarterly samples or analysis of four quarterly samples. The latter procedure is recommended.

(4) If the gross beta particle activity minus the naturally occurring potassium-40 beta particle activity at a sampling point has a running annual average (computed quarterly) less than or equal to 15 pCi/L (screening level), the commissioner may reduce the frequency of monitoring at that sampling point to every three years. Community waterworks owners shall collect all samples required in subdivision 2 b of this subsection during the reduced monitoring period.

(5) For community waterworks in the vicinity of a nuclear facility, the commissioner may allow the community waterworks owner to utilize environmental surveillance data collected by the nuclear facility in lieu of the monitoring at the community waterworks' entry point(s), where the commissioner determines such data is applicable to a particular waterworks. In the event that there is a release from a nuclear facility, community waterworks owners which are using surveillance data shall begin monitoring at the community waterworks' entry point(s) in accordance with subdivision 2 b of this subsection.

c. Owners of community waterworks designated by the commissioner to monitor for beta particle and photon radioactivity can not apply to the commissioner for a waiver from the monitoring frequencies specified in subdivision 2 a or b of this subsection.

d. Community waterworks owners may analyze for naturally occurring potassium-40 beta particle activity from the same or equivalent sample used for the gross beta particle activity analysis. Community waterworks owners are allowed to subtract the potassium-40 beta particle activity value from the total gross beta particle activity value to determine if the screening level is exceeded. The potassium-40 beta particle activity shall be calculated by multiplying elemental potassium concentrations (in mg/L) by a factor of 0.82.

e. If the gross beta particle activity minus the naturally occurring potassium-40 beta particle activity exceeds the appropriate screening level, an analysis of the sample shall be performed to identify the major radioactive constituents present in the sample and the appropriate doses shall be calculated and summed to determine compliance with 12VAC5-590-400 B 5 a, using the formula in 12VAC590-400 B 5 b. Doses shall also be calculated and combined for measured levels of tritium and strontium to determine compliance.

f. Community waterworks owners shall monitor monthly at the entry point(s) which exceed the maximum contaminant level in 12VAC5-590-400 B 5 beginning the month after the exceedance occurs. Community waterworks owners shall continue monthly monitoring until the community waterworks has established, by a rolling average of three monthly samples, that the PMCL is being met. Community waterworks owners who establish that the PMCL is being met shall return to quarterly monitoring until they meet the requirements set forth in subdivision 2 a (1) or 2 b (4) of this subsection.

3. General monitoring and compliance requirements for radionuclides.

a. The commissioner may require more frequent monitoring than specified in subdivisions 1 and 2 of this subsection, or may require confirmation samples at his discretion. The results of the initial and confirmation samples shall be averaged for use in compliance determinations.

b. Each community waterworks owner shall monitor at the time designated by the commissioner during each compliance period.

c. Compliance: Compliance with 12VAC5-590-400 B 2 through 12VAC5-590-400 B 5 will be determined based on the analytical results(s) obtained at each entry point. If one entry point is in violation of a PMCL, the community waterworks is in violation of the PMCL.

(1) For community waterworks monitoring more than once per year, compliance with the PMCL is determined by a running annual average at each entry point. If the average of any entry point is greater than the PMCL, then the community waterworks is out of compliance with the PMCL.

(2) For community waterworks monitoring more than once per year, if any sample result will cause the running average to exceed the PMCL at any entry point, the community waterworks is out of compliance with the PMCL immediately.

(3) Community waterworks owners shall include all samples taken and analyzed under the provisions of this section in determining compliance, even if that number is greater than the minimum required.

(4) If a community waterworks owner does not collect all required samples when compliance is based on a running annual average of quarterly samples, compliance will be based on the running average of the samples collected.

(5) If a sample result is less than the method detection limit as specified in Appendix B, zero will be used to calculate the annual average, unless a gross alpha particle activity is being used in lieu of radium-226 and/or uranium. If the gross alpha particle activity result is less than the method detection limit as specified in Appendix B, 1/2 the method detection limit will be used to calculate the annual average.

d. The commissioner has the discretion to delete results of obvious sampling or analytic errors.

e. If the PMCL for radioactivity set forth in 12VAC5-590-400 B through 12VAC5-590-400 B 5 is exceeded, the owner of a community waterworks shall give notice to the commissioner pursuant to 12VAC5-590-530 and to the public as required by 12VAC5-590-540.

12VAC5-590-379. Groundwater system monitoring.

A. General monitoring requirements.

1. Owners of groundwater systems, including consecutive and wholesale waterworks, shall conduct monitoring in accordance with this section, except that requirements do not apply to waterworks that combine all of their groundwater with surface water or with groundwater under the direct influence of surface water prior to treatment in accordance with 12VAC5-590-420.

2. Source water monitoring for owners of groundwater systems that do not provide 4-log treatment of viruses for their groundwater sources before or at the first customer are described in subsection B of this section.

3. Owners of groundwater systems that provide at least 4-log treatment of viruses before or at the first customer are required to conduct compliance monitoring in accordance with 12VAC5-590-421 C.

4. Owners of groundwater systems that have confirmed fecal contamination, as determined by source water monitoring conducted under subsection B of this section or have been notified of a significant deficiency as described in 12VAC5-590-350 D shall implement one or more of the corrective actions outlined in 12VAC5-590-421 A 1, as prescribed by the commissioner.

5. Owners of groundwater systems that do not provide 4-log treatment of viruses before or at the first customer and are not performing compliance monitoring shall provide triggered source water monitoring plans to the commissioner.

6. Any source water sample collected in accordance with this section shall be analyzed for E. coli using one of the analytical methods in 40 CFR 141.402 (c).

B. Groundwater source microbial monitoring.

1. Triggered source water monitoring.

a. General requirements. Groundwater system owners shall conduct triggered source water monitoring if both the conditions identified in subdivisions B 1 a (1) and (2) of this section exist.

(1) The groundwater system does not provide at least 4-log treatment of viruses before or at the first customer for each groundwater source; and

(2) The groundwater system owner is notified that a sample collected under 12VAC5-590-370 A is total coliform-positive and the sample is not invalidated under 12VAC5-590-380 E.

b. Sampling requirements. Groundwater system owners shall collect, within 24 hours of notification of the total coliform-positive sample, one groundwater source sample from each groundwater source in use at the time the total coliform-positive sample was collected under 12VAC5-590-370 A, except as provided in this subdivision B 1 b.

(1) The commissioner may extend the 24-hour time limit on a case-by-case basis if the owner cannot collect the groundwater source water sample within 24 hours due to circumstances beyond his control. In the case of an extension, the commissioner shall specify how much time the owner has to collect the sample.

(2) If approved by the commissioner, owners of waterworks with more than one groundwater source may meet the requirements of subdivision B 1 of this section by sampling a representative groundwater source or sources. Owners shall submit, for the commissioner's approval, a triggered source water monitoring plan that identifies one or more groundwater sources that are representative of each monitoring site in the waterworks' bacteriological sample siting report or that identifies groundwater sources that are hydro-geologically similar and clearly identifies which sources will be sampled.

(3) A groundwater system serving 1,000 people or fewer may use a triggered source water sample collected from a groundwater source to meet both the requirements of 12VAC5-590-380 and to satisfy the monitoring requirements of subdivision B 1 of this section for a groundwater source.

c. Additional requirements.

(1) If an E. coli positive triggered source water sample collected under subdivision B 1 of this section is not invalidated under subdivision B 2 of this section, the groundwater system owner shall provide public notification and collect five additional source water samples from the same source within 24 hours of being notified of the E. coli positive sample.

(2) If any of the five additional samples are E. coli positive, the groundwater system owner shall comply with the treatment technique requirements of 12VAC5-590-421.

d. Consecutive and wholesale waterworks.

(1) A consecutive groundwater system owner that has a total coliform-positive sample collected in accordance with 12VAC5-590-370 A shall notify the wholesale waterworks owner and the district engineer within 24

hours of being notified of the total coliform-positive sample.

(2) A wholesale groundwater system owner shall comply with the following:

(a) A wholesale groundwater system owner that receives notice from a consecutive waterworks it serves that a sample collected in accordance with 12VAC5-590-370 A is total coliform-positive shall, within 24 hours of being notified, collect a sample from its groundwater source(s) as described in subdivision B 1 of this section.

(b) If the sample collected under subdivision B 1 of this section is E. coli positive, the wholesale groundwater system owner shall within 24 hours notify all consecutive waterworks served by that groundwater source of the E. coli source water positive sample as described in 12VAC5-590-540 and shall meet the requirements of subdivision B 1 c of this section.

e. Exception to the triggered source water monitoring requirements. A groundwater system owner is not required to comply with the source water monitoring requirements of subdivision B 1 of this section if the commissioner determines, and documents in writing, that the total coliform-positive sample collected in accordance with 12VAC5-590-370 A is invalidated under 12VAC5-590-380 E.

2. Invalidation of an E. coli positive groundwater source sample.

a. A groundwater system owner may obtain the commissioner's invalidation of an E. coli positive groundwater source sample collected under subdivision B 1 of this section only under the conditions specified in subdivisions B 2 a (1) and (2) of this section:

(1) The groundwater system owner provides the commissioner with written notice from the laboratory that improper sample analysis occurred; or

(2) The commissioner determines and documents in writing that there is substantial evidence that the E. coli positive groundwater source sample is not related to source water quality.

b. If the commissioner invalidates an E. coli positive groundwater source sample, the groundwater system owner shall collect another source water sample under subdivision B 1 of this section within 24 hours of being notified by the commissioner of the invalidation decision and have it analyzed for E. coli.

3. Sampling location. All groundwater source samples required under subdivision B 1 of this section shall be collected at a location prior to any treatment of the groundwater source unless otherwise approved by the commissioner.

4. Public notification. The owner of a groundwater system with a source sample collected under subsection B of this section that is E. coli positive and that is not invalidated under subdivision B 2 of this section, including consecutive waterworks served by the groundwater source, shall conduct public notification as required in 12VAC5-590-540 A 1.

5. Monitoring violations. Failure to meet the monitoring requirements of subdivision B 1 of this section is a violation and requires the groundwater system owner to provide public notification as required in 12VAC5-590-540 A 3.

12VAC5-590-380. Bacteriological quality.

A. The standard sample volume for the coliform test shall consist of 100 milliliters.

B. Waterworks need only to determine the presence or absence of total coliforms; a determination of total coliform density is not required.

C. Primary Maximum Contaminant Levels (PMCLs) for microbiological contaminants.

1. The PMCL is based on the presence or absence of total coliforms in a sample, rather than coliform density.

a. A waterworks which is required to collect at least 40 samples per month is in compliance if no more than 5.0% of the samples collected during a month are total coliform positive.

b. A waterworks which is required to collect fewer than 40 samples per month is in compliance if no more than one sample collected during the month is total coliform positive.

2. Any fecal coliform positive repeat sample or E. coli positive repeat sample, or any total coliform positive repeat sample following a fecal coliform positive or E. coli positive routine sample constitutes a violation of the PMCL for total coliforms. For purposes of the public notification requirements in 12VAC5-590-540, this is a violation that may pose an acute risk to health and is a Tier 1 condition.

3. Compliance must be determined with the PMCL for total coliforms for each month in which monitoring for total coliforms is required.

4. The board hereby identifies the following as the best technology, treatment techniques, or other means available for achieving compliance with the maximum contaminant level for total coliforms.

a. Protection of wells from contamination by coliforms by appropriate placement and construction;

b. Maintenance of a disinfectant residual throughout the distribution system;

c. Proper maintenance of the distribution system including appropriate pipe replacement and repair procedures, main flushing programs, proper operation and maintenance of storage tanks and reservoirs, continual maintenance of positive water pressure in all parts of the distribution system and an approved cross connection control program;

d. Filtration and disinfection of surface water or surface influenced groundwater or disinfection of ground water using strong oxidants such as chlorine, chlorine dioxide, or ozone.

D. A total coliform positive result is indicative of a breakdown in the protective barriers and shall be cause for special follow-up action to locate and eliminate the cause of contamination.

1. Repeat monitoring. If a routine sample is total coliform positive, the waterworks owner shall collect a set of repeat samples within 24 hours of being notified of the positive result. A waterworks owner who collects more than one routine sample a month shall collect no fewer than three repeat samples for each total coliform positive sample found. A waterworks owner who collects one routine sample a month or fewer shall collect no fewer than four repeat samples for each total coliform positive sample found. For groundwater systems, the requirements of 12VAC5-590-379 shall also apply. Owners of groundwater systems who are required to collect four repeat samples may use one of the repeat samples to satisfy the requirements of 12VAC5-590-379. These repeat samples must be analyzed for E. coli using one of the analytical methods in 40 CFR 141.402 (c).

2. The waterworks owner shall collect at least one repeat sample from the sampling tap where the original total coliform positive sample was taken, and at least one repeat sample at a tap within five service connections upstream and at least one repeat sample at a tap within five service connections downstream of the original sampling site. If a total coliform positive sample is at the end of the distribution system, or one away from the end of the distribution system, the ~~division~~ commissioner may waive the requirement to collect at least one repeat sample upstream or downstream of the original sampling site.

3. The waterworks owner shall collect all repeat samples on the same day, except the ~~division~~ commissioner may allow a waterworks with a single service connection to collect the required set of repeat samples over a four-day period or to collect a larger volume repeat sample(s) in one or more sample containers of any size as long as the total volume collected is at least 400 ml (300 ml for systems which collect more than one routine sample per month).

4. If one or more repeat samples in the set is total coliform positive, the waterworks owner shall collect an additional set of repeat samples in the manner specified in subdivisions 1 through 3 of this subsection. The additional samples shall be collected within 24 hours of being notified of the positive result. The waterworks owner shall repeat this process until either (i) total coliforms are not detected in one complete set of repeat samples or (ii) the PMCL for total coliforms has been exceeded and the ~~division~~ commissioner so notified.

5. Waterworks owners required to collect fewer than five routine samples per month and having one or more total coliform positive samples shall collect at least five routine samples during the next month the waterworks provides water to the public, except that the ~~division~~ commissioner may waive this requirement if the conditions of subdivision 5 a or 5 b of this subsection are met. The ~~division~~ commissioner shall not waive the requirement for a system to collect repeat samples in subdivisions 1 through 4 of this subsection. For groundwater systems, if any of the routine samples collected in accordance with subdivision D 5 of this section are total coliform positive, then the requirements of 12VAC5-590-379 shall apply.

a. The ~~division~~ commissioner may waive the requirement to collect five routine samples the next month the waterworks provides water to the public if the ~~division (or an agent of the owner previously approved by the division)~~ commissioner (or an agent previously approved by the commissioner), performs a site visit before the end of the next month the waterworks provides water to the public. Although a sanitary survey need not be performed, the site visit shall be sufficiently detailed to allow the ~~division~~ commissioner to determine whether additional monitoring or any corrective action is needed.

b. The ~~division~~ commissioner may waive the requirement to collect five routine samples the next month the waterworks provides water to the public if the ~~division~~ commissioner has determined why the sample was total coliform positive and establishes that the waterworks owner has corrected the problem or will correct the problem before the end of the next month the waterworks serves water to the public. In this case, the ~~division~~ commissioner shall document this decision to waive the following month's additional monitoring requirement in writing~~, have it approved and signed by the supervisor of the state official who recommends such a decision,~~ and make this document available to the EPA and public. The written documentation shall describe the specific cause of the total coliform positive sample and what action the waterworks owner has taken or will take to correct this problem. The ~~division~~ commissioner cannot waive the requirement to collect five routine samples the next month the waterworks provides water to the public solely on the grounds that all repeat samples are total coliform negative. Under this subdivision, a waterworks owner shall still take at least one routine sample before the end

of the next month it serves water to the public and use the results to determine compliance with the MCL for total coliforms.

6. Results of all routine and repeat samples not invalidated by the ~~division~~ commissioner shall be included in determining compliance with the MCL for total coliforms.

7. Special purpose samples, such as those taken to determine whether disinfection practices are sufficient following pipe placement, replacement or repair, shall not be used to determine compliance. Repeat samples are not considered special purpose samples.

E. A total coliform positive sample invalidated under this paragraph does not count towards meeting the minimum monitoring requirements of this section.

1. The ~~division~~ commissioner may invalidate a total coliform positive sample only if all of the following conditions are met:

a. The laboratory establishes that improper sample analysis caused the total coliform positive result;

b. The ~~division~~ commissioner, on the basis of the results of repeat samples collected as required by subdivisions D 1 through 4 of this section determines that the total coliform positive sample resulted from a domestic or other nondistribution system plumbing problem. The ~~division~~ commissioner cannot invalidate a sample on the basis of repeat sample results unless all repeat sample(s) collected at the same tap as the original total coliform-positive sample are also total coliform-positive, and all repeat samples collected within five service connections of the original tap are total coliform-negative (e.g., the ~~division~~ commissioner cannot invalidate a total coliform-positive sample on the basis of repeat samples if all the repeat samples are total coliform-negative, or if the waterworks has only one service connection); and

c. The ~~division~~ commissioner has substantial grounds to believe that a total coliform positive result is due to a circumstance or condition which does not reflect water quality in the distribution system. In this case, the waterworks owner shall still collect all repeat samples required under subdivisions D 1 through 4 of this section, and use them to determine compliance with the MCL for total coliforms. To invalidate a total coliform positive sample under this subdivision, the decision with the rationale for the decision shall be documented in writing, and approved and signed by the ~~supervisor of the field engineer who recommended the decision~~ commissioner. The ~~division~~ commissioner shall make this document available to EPA and the public. The written documentation shall state the specific cause of the total coliform positive sample, and what action the waterworks owner has taken, or will take, to correct this problem. The ~~division~~ commissioner shall not invalidate a total coliform positive sample solely on the grounds that all repeat samples are total coliform negative.

2. A laboratory must invalidate a sample because of sampling interference (i.e., turbid culture in absence of (i) gas production, or (ii) acid reaction; or exhibition of confluent growth; or production of colonies too numerous to count). The waterworks owners shall collect a replacement sample from the same location, and have it analyzed for the presence of total coliforms. The waterworks owner must continue to resample within 24 hours and have the samples analyzed until they obtain a valid result. The ~~division~~ commissioner may waive the 24-hour time limit on a case-by-case basis.

F. Fecal coliforms/Escherichia coli (E. coli) testing.

1. If any routine or repeat sample or replacement is total coliform positive, the waterworks owner shall analyze that total coliform positive culture medium to determine if fecal coliforms are present, except that the waterworks owner may test for E. coli in lieu of fecal coliforms. If fecal coliforms or E. coli are present, the waterworks owner must notify the ~~division's appropriate field office~~ ODW by the end of the day when the waterworks is notified of the test result, unless the ~~division's~~ ODW's field office is closed, in which case the ~~division~~ commissioner must be notified before the end of the next business day.

2. The ~~division~~ commissioner has the discretion to allow a waterworks, on a case-by-case basis, to forgo fecal coliform or E. coli testing on a total coliform-positive sample if that waterworks assumes that the total coliform-positive sample is fecal coliform-positive or E. coli-positive. Accordingly, the waterworks must notify the ~~division~~ commissioner as specified in subdivision 1 of this subsection and the provisions of subdivision C 2 of this section apply.

G. Violation determination flowchart -- See Appendix K.

H. Groundwater sources.

1. Groundwater sources shall be disinfected in accordance with 12VAC5-590-1000 when the total coliform geometric mean of 20 or more raw water samples ~~(measured by the multiple-portion decimal-dilution (MPN) method)~~ measured by a method yielding a multiple-portion decimal-dilution (MPN) result is greater than three. The value 1.0 shall be used to represent a negative coliform result in the calculation of the geometric mean.

2. Groundwater sources containing a total coliform ~~concentrations as measured by the multiple-portion decimal-dilution (MPN) method~~ geometric mean of 100 or more organisms per 100 milliliters ~~based on the geometric mean of 20~~ or with more than 10% of these samples exceeding 100 organisms per 100 milliliters constitutes

unacceptable contamination for disinfection treatment only.

3. Groundwater ~~with widely fluctuating or increasing bacteriological results may be determined by the division to be unsuitable for disinfection treatment alone~~ sources shall be disinfected in accordance the requirements of 12VAC5-590-1000 when the source water quality contributes to the waterworks' failure to meet the bacteriological PMCL specified in subsection C of this section.

4. Groundwater sources shall be disinfected in accordance with 12VAC5-590-421 A 1 d when the results of source development samples specified in 12VAC5-590-840 B 11 indicate the presence of E. coli in two or more samples.

5. Groundwater sources shall be disinfected in accordance with 12VAC5-590-421 A 1 d when the results of raw water monitoring conducted in accordance with 12VAC5-590-425 indicate the presence of E. coli in two or more samples during any running six-month period.

I. Groundwater systems conducting source water monitoring as described in 12VAC5-590-379 shall determine the presence or absence of E. coli. All samples shall be analyzed in accordance with 12VAC5-590-440 by the DCLS or by a laboratory certified by DCLS for drinking water samples.

12VAC5-590-410. Determination of compliance.

For the purposes of determining compliance with a PMCL or action level, the following criteria shall be used:

A. Bacteriological results. Compliance with the PMCL for coliform bacteria shall be determined as specified in 12VAC5-590-380 C. Repeat samples shall be used as a basis for determining compliance with these regulations.

B. Inorganic chemicals.

1. Antimony, arsenic, asbestos, barium, beryllium, cadmium, cyanide (as free cyanide), chromium, fluoride, mercury, nickel, selenium, and thallium. Where the results of sampling for antimony, arsenic, asbestos, barium, beryllium, cadmium, cyanide (as free cyanide), chromium, fluoride, mercury, nickel, selenium, or thallium exceed the PMCL, the owner shall take a confirmation sample, at the same sampling point, within two weeks of notification of the analytical results of the first sample.

a. The results of the initial and confirmation samples shall be averaged to determine compliance with subdivision B 1 c of this subsection. The commissioner has the discretion to delete results of obvious sampling errors.

b. The commissioner may require more frequent monitoring.

c. Compliance with antimony, arsenic, asbestos, barium, beryllium, cadmium, cyanide (as free cyanide), chromium, fluoride, mercury, nickel, selenium, and thallium in Table 2.2 of 12VAC5-590-440 shall be determined based on the analytical result(s) obtained at each sampling point.

(1) Owners that are conducting monitoring more frequently than annually, compliance with the PMCL for antimony, arsenic, asbestos, barium, beryllium, cadmium, cyanide (as free cyanide), chromium, fluoride, mercury, nickel, selenium, and thallium is determined by a running annual average at each sampling point. If the average at any sampling point is greater than the PMCL, then the waterworks is out of compliance. If any one sample would cause the annual average to be exceeded, then the waterworks is out of compliance immediately. Any sample below the method detection limit shall be calculated at zero for the purpose of determining the annual average. If an owner fails to collect the required number of samples, compliance (average concentration) shall be based on the total number of samples collected.

(2) Owners that are monitoring annually, or less frequently, the waterworks is not out of compliance with the PMCL for antimony, arsenic, asbestos, barium, beryllium, cadmium, cyanide (as free cyanide), chromium, fluoride, mercury, nickel, selenium, and thallium if the average of the original sample and a confirmation sample of a contaminant at any sampling point is greater than the PMCL. Owners of waterworks monitoring annually or less frequently whose sample result exceeds the PMCL shall begin quarterly sampling. The waterworks shall not be considered in violation of the PMCL until it has completed one year of quarterly sampling. However, if the confirmation sample is not collected, the waterworks is in violation of the PMCL for antimony, arsenic, asbestos, barium, beryllium, cadmium, cyanide (as free cyanide), chromium, fluoride, mercury, nickel, selenium, or thallium. If an owner fails to collect the required number of samples, compliance (average concentration) shall be based on the total number of samples collected.

2. Nitrate and nitrite. Compliance with the PMCL is determined based on one sample from each sampling point if the levels of these contaminants are below the PMCLs. Where nitrate or nitrite sample results exceed the PMCL, the owner shall take a confirmation sample from the same sampling point that exceeded the PMCL within 24 hours of the owner's receipt of the analytical results of the first sample. The results of the initial and confirmation sample shall be averaged to determine compliance with this subdivision. Owners unable to comply with the 24-hour sampling requirement shall immediately notify the consumers in the area served by the waterworks in accordance with 12VAC5-590-540. Owners exercising this

option shall take and analyze a confirmation sample within two weeks of notification of the analytical results of the first sample. The commissioner may require more frequent monitoring. The commissioner has the discretion to delete results of obvious sampling errors.

C. Organic chemicals.

1. VOCs and SOCs. A confirmation sample shall be required for positive results for contaminants listed in Table 2.3. The commissioner has the discretion to delete results of obvious sampling errors from this calculation.

a. The results of the initial and confirmation sample shall be averaged to determine the waterworks' compliance in accordance with subdivision C 1 b of this subsection.

b. Compliance with Table 2.3 shall be determined based on the analytical results obtained at each sampling point. Any samples below the detection limit shall be calculated as zero for the purposes of determining the annual average. (Note: Refer to detection definition at 12VAC5-590-370 B 2 h.) If an owner fails to collect the required number of samples, compliance (average concentration) will be based on the total number of samples collected.

(1) Owners that are conducting monitoring more frequently than annually, compliance is determined by a running annual average of all samples taken at each sampling point. If the annual average of any sampling point is greater than the PMCL, then the waterworks is out of compliance. If the initial sample or a subsequent sample would cause the annual average to be exceeded, then the waterworks is out of compliance immediately. Any samples below the detection limit shall be calculated as zero for purposes of determining the annual average. (Note: Refer to detection definition at 12VAC5-590-370 B 2 h.)

(2) If monitoring is conducted annually, or less frequently, the waterworks is not in violation if the average of the initial and confirmation sample is greater than the PMCL for that contaminant; however, the owner shall begin quarterly sampling. The waterworks will not be considered in violation of the PMCL until the owner has completed one year of quarterly sampling. If any sample will cause the running annual average to exceed the PMCL at any sampling point, the waterworks is immediately out of compliance with the PMCL.

2. Disinfectant residuals, disinfection byproducts and disinfection byproduct precursors. Compliance with 12VAC5-590-370 B 3 a through B 3 k is as follows:

a. General requirements.

(1) Where compliance is based on a running annual average of monthly or quarterly samples or averages and the owner fails to monitor for TTHM, HAA5, or bromate, this failure to monitor will be treated as a monitoring violation for the entire period covered by the annual average. Where compliance is based on a running annual average of monthly or quarterly samples or averages and the owner's failure to monitor makes it impossible to determine compliance with MRDLs for chlorine and chloramines, this failure to monitor shall be treated as a monitoring violation for the entire period covered by the annual average.

(2) All samples taken and analyzed under subdivision C 2 of this section shall be included in determining compliance, even if that number is greater than the minimum required.

(3) If during the first year of monitoring under 12VAC5-590-370 B 3 b, any individual quarter's average will cause the running annual average of that waterworks to exceed the PMCL in Table 2.12 and Table 2.13, the waterworks is out of compliance at the end of that quarter.

b. Disinfection byproducts.

(1) TTHMs and HAA5.

(a) Running Annual Average. All waterworks using surface water or groundwater under the direct influence of surface water serving 10,000 or more persons shall comply with this section beginning January 1, 2002. All waterworks using surface water or groundwater under the direct influence of surface water serving less than 10,000 persons and all waterworks using groundwater not under the direct influence of surface water shall comply with this section beginning January 1, 2004. All waterworks shall comply with this section until the dates listed in 12VAC5-590-370 B e (3) (c).

(i) For waterworks monitoring quarterly, compliance with PMCLs in Table 2.13 shall be based on a running annual arithmetic average, computed quarterly, of quarterly arithmetic averages of all samples collected by the owner as prescribed by 12VAC5-590-370 B 3 e (1).

(ii) For waterworks monitoring less frequently than quarterly, the owner demonstrates PMCL compliance if the average of samples taken that year under the provisions of 12VAC5-590-370 B 3 e (1) does not exceed the PMCLs in Table 2.13. If the average of these samples exceeds the PMCL, the owner shall increase monitoring to once per quarter per treatment plant and such a waterworks is not in violation of the PMCL until it has completed one year of quarterly monitoring, unless the result of fewer then four quarter of monitoring will cause the running annual average to exceed the PMCL, in which case the waterworks is in violation at the end of that quarter. Owners of waterworks required to increase monitoring frequency to quarterly monitoring shall calculate compliance by including the sample that

triggered the increase monitoring plus the following three quarter of monitoring.

(iii) If the running annual arithmetic average of quarterly averages covering any consecutive four-quarter period exceeds the PMCL in Table 2.12 and Table 2.13, the waterworks is in violation of the PMCL and the owner shall notify the public pursuant to 12VAC5-590-540 in addition to reporting to the commissioner pursuant to 12VAC5-590-530.

(iv) If an owner fails to complete four consecutive quarters of monitoring, compliance with the PMCL in Table 2.13 for the last four-quarter compliance period shall be based on an average of the available data.

(b) Locational Running Annual Average (LRAA). All waterworks shall comply with this section beginning on the dates listed in 12VAC5-590-370 B e (3) (c).

(i) Owners of waterworks required to monitor quarterly shall calculate LRAAs for TTHM and HAA5 using monitoring results collected under 12VAC5-590-370 B 3 e (3) and determine that each LRAA does not exceed the PMCL in order to comply with PMCLs in Table 2.13. If the owner fails to complete four consecutive quarters of monitoring, the owner shall calculate compliance with the PMCL based on the average of the available data from the most recent four quarters. If the owner takes more than one sample per quarter at a monitoring location, the owner shall average all samples taken in the quarter at that location to determine a quarterly average to be used in the LRAA calculation.

(ii) Owners of waterworks required to monitor yearly or less frequently shall determine that each sample taken is less than the PMCL in order to determine compliance with PMCLs in Table 2.13. If any sample exceeds the PMCL, the owner shall comply with the requirements of 12VAC5–590-370 B 3 e (3) (g). If no sample exceeds the PMCL, the sample result for each monitoring location is considered the LRAA for that monitoring location.

(iii) Waterworks are in violation of the monitoring requirements for each quarter that a monitoring result would be used in calculating an LRAA if the owner fails to monitor.

(iv) Waterworks have exceeded the operational evaluation level at any monitoring location where the sum of the two previous quarters' TTHM results plus twice the current quarter's TTHM result, divided by four to determine an average, exceeds 0.080 mg/L, or where the sum of the two previous quarters' HAA5 results plus twice the current quarter's HAA5 result, divided by four to determine an average, exceeds 0.060 mg/L.

((a)) Owners of waterworks that exceed the operational evaluation level shall conduct an operational evaluation and submit a written report of the evaluation to the commissioner no later than 90 days after being notified of the analytical result that causes the waterworks to exceed the operational evaluation level. The written report shall be made available to the public upon request.

((b)) The operational evaluation report shall include an examination of waterworks treatment and distribution operational practices, including storage tank operations, excess storage capacity, distribution system flushing, changes in sources or source water quality, and treatment changes or problems that may contribute to TTHM and HAA5 formation and what steps could be considered to minimize future exceedances.

((c)) The owner may request and the commissioner may allow waterworks to limit the scope of the evaluation if the owner is able to identify the cause of the operational evaluation level exceedance. The request to limit the scope of the evaluation does not extend the schedule in paragraph ((a)) of this section for submitting the written report. The commissioner shall approve this limited scope of evaluation in writing and the owner shall keep that approval with the completed report.

(2) Bromate. Compliance shall be based on a running annual arithmetic average, computed quarterly, of monthly samples (or, for months in which the waterworks takes more than one sample, the average of all samples taken during the month) collected by the owner as prescribed by 12VAC5-590-370 B 3 g. If the average of samples covering any consecutive four-quarter period exceeds the PMCL in Table 2.13, the waterworks is in violation of the PMCL and the owner shall notify the public pursuant to 12VAC5-590-540, in addition to reporting to the commissioner pursuant to 12VAC5-590-530. If an owner fails to complete 12 consecutive months' monitoring, compliance with the PMCL for the last four-quarter compliance period shall be based on an average of the available data.

(3) Chlorite. Compliance shall be based on an arithmetic average of each three sample set taken in the distribution system as prescribed by 12VAC5-590-370 B 3 f (1) (a), (b) and (c). If the arithmetic average of any three sample set exceeds the PMCL in Table 2.13, the waterworks is in violation of the PMCL and the owner shall notify the public pursuant to 12VAC5-590-540, in addition to reporting to the commissioner pursuant to 12VAC5-590-530.

c. Disinfectant residuals.

(1) Chlorine and chloramines.

(a) Compliance shall be based on a running annual arithmetic average, computed quarterly, of monthly averages of all samples collected by the waterworks under 12VAC5-590-370 B 3 h (1) (a). If the average

covering any consecutive four-quarter period exceeds the MRDL in Table 2.12, the waterworks is in violation of the MRDL and the owner shall notify the public pursuant to 12VAC5-590-540, in addition to reporting to the commissioner pursuant to 12VAC5-590-530.

(b) In cases where waterworks switch between the use of chlorine and chloramines for residual disinfection during the year, compliance shall be determined by including together all monitoring results of both chlorine and chloramines in calculating compliance. Reports submitted pursuant to 12VAC5-590-530 shall clearly indicate which residual disinfectant was analyzed for each sample.

(2) Chlorine dioxide.

(a) Acute violations. Compliance shall be based on consecutive daily samples collected by the owner under 12VAC5-590-370 B 3 h (2) (a). If any daily sample taken at the entrance to the distribution system exceeds the MRDL in Table 2.12, and on the following day one (or more) of the three samples taken in the distribution system exceed the MRDL, the waterworks is in violation of the MRDL and the owner shall take immediate corrective action to lower the level of chlorine dioxide below the MRDL and the owner shall notify the public pursuant to the procedures for Tier 1 conditions in 12VAC5-590-540 in addition to reporting to the commissioner in pursuant to 12VAC5-590-530. Failure to take samples in the distribution system the day following an exceedance of the chlorine dioxide MRDL at the entrance to the distribution system will also be considered an MRDL violation and the owner shall notify the public of the violation in accordance with the provisions for Tier 1 conditions in 12VAC5-590-540 in addition to reporting to the commissioner in pursuant to 12VAC5-590-530.

(b) Nonacute violations. Compliance shall be based on consecutive daily samples collected by the owner under 12VAC5-590-370 B 3 h (2) (a). If any two consecutive daily samples taken at the entrance to the distribution system exceed the MRDL in Table 2.12 and all distribution system samples taken are below the MRDL, the waterworks is in violation of the MRDL and the owner shall take corrective action to lower the level of chlorine dioxide below the MRDL at the point of sampling and shall notify the public pursuant to the procedures for Tier 2 conditions in 12VAC5-590-540 in addition to reporting to the commissioner in pursuant to 12VAC5-590-530. Failure to monitor at the entrance to the distribution system the day following an exceedance of the chlorine dioxide MRDL at the entrance to the distribution system is also an MRDL violation and the owner shall notify the public of the violation in accordance with the provisions for Tier 2 conditions in 12VAC5-590-540 in addition to reporting to the commissioner in pursuant to 12VAC5-590-530.

d. Disinfection byproduct precursors (DBPP). Compliance shall be determined as specified by 12VAC5-590-420 H 3. Owners may begin monitoring to determine whether Step 1 TOC removals can be met 12 months prior to the compliance date for the waterworks. This monitoring is not required and failure to monitor during this period is not a violation. However, any owner that does not monitor during this period, and then determines in the first 12 months after the compliance date that it is not able to meet the Step 1 requirements in 12VAC5-590-420 H 2 b and shall therefore apply for alternate minimum TOC removal (Step 2) requirements, is not eligible for retroactive approval of alternate minimum TOC removal (Step 2) requirements as allowed pursuant to 12VAC5-590-420 H 2 c and is in violation. Owners may apply for alternate minimum TOC removal (Step 2) requirements any time after the compliance date. For waterworks required to meet Step 1 TOC removals, if the value calculated under 12VAC5-590-420 H 3 a (4) is less than 1.00, the waterworks is in violation of the treatment technique requirements and the owner shall notify the public pursuant to 12VAC5-590-540 in addition to reporting to the commissioner pursuant to 12VAC5-90-530.

D. Radiological results (gross alpha, combined radium-226 and radium-228, uranium and man-made radioactivity). Compliance with the radiological PMCLs shall be in accordance with 12VAC5-590-370 D 3 c. PMCLs are indicated in subsection B of Table 2.5. Sampling for radiological analysis shall be in compliance with 12VAC5-590-370 D 1 and D 2. Furthermore, compliance shall be determined by rounding off results to the same number of significant figures as the PMCL for the substance in question.

E. Reserved.

F. Turbidity. The requirements in this subsection apply to filtered waterworks until June 29, 1993. The requirements in this section apply to unfiltered waterworks with surface water sources or groundwater sources under the direct influence of surface water that are required to install filtration equipment until June 29, 1993, or until filtration is installed, whichever is later. When a sample exceeds the PMCL for turbidity a confirmation sample shall be collected for analysis as soon as possible. In cases where a turbidimeter is required at the waterworks, the preferable resampling time is within one hour of the initial sampling. The repeat sample shall be the sample used for the purpose of calculating the monthly average. Compliance for public notification purposes shall be based on the monthly averages of the daily samples. However, public notification is also required if the average of samples taken on two consecutive days exceeds five NTU.

G. All analyses for PMCL and action level compliance determinations shall be consistent with current Environmental Protection Agency Regulations found at 40 CFR Part 141.

12VAC5-590-420. Treatment technique requirement.

This section establishes treatment technique requirements in lieu of maximum contaminant levels for specified contaminants. Failure to meet any requirement of this section after the applicable date specified is a treatment technique violation.

A. The filtration and disinfection provisions of this section are required treatment techniques for any waterworks supplied by a surface water source and waterworks supplied by a groundwater source under the direct influence of surface water. This section establishes treatment technique requirements in lieu of PMCL's for the following contaminants: Giardia lamblia, viruses, heterotrophic bacteria (HPC), Legionella, Cryptosporidium and turbidity. Each waterworks with a surface water source or a groundwater source under the direct influence of surface water shall provide treatment of that source water that complies with these treatment technique requirements. The treatment technique requirements consist of installing and properly operating water treatment processes which reliably achieve:

1. At least 99.9% (3-log) removal and/or inactivation of Giardia lamblia cysts between a point where the raw water is not subject to recontamination by surface water runoff and a point downstream before or at the first customer; and

2. At least 99.99% (4-log) removal and/or inactivation of viruses between a point where the raw water is not subject to recontamination by surface water runoff and a point downstream before or at the first customer; and

3. At least 99% (2-log) removal of Cryptosporidium between a point where the raw water is not subject to recontamination by surface water runoff and a point downstream before or at the first customer.

B. A waterworks using a surface water source or a groundwater source under the direct influence of surface water is considered to be in compliance with the requirements of subsection A of this section if it meets the following disinfection filtration and enhanced filtration and disinfection for Cryptosporidium requirements:

1. Disinfection. Waterworks with a surface water source or a groundwater source under the direct influence of surface water shall provide disinfection treatment in accordance with this section.

a. The disinfection treatment shall be sufficient to ensure that the total treatment processes of that waterworks achieve at least 99.9% (3-log) inactivation and/or removal of Giardia lamblia cysts and at least 99.99% (4-log) inactivation and/or removal of viruses.

b. The residual disinfectant concentration in the water entering the distribution system cannot be less than 0.2 mg/L for more than four hours.

c. The residual disinfectant concentration in the distribution system, measured as total chlorine, combined chlorine, or chlorine dioxide cannot be undetectable in more than 5.0% of the samples each month, for any two consecutive months that the waterworks serves water to the public. Water in the distribution system with a heterotrophic bacteria concentration less than or equal to 500/mL, measured as heterotrophic plate count (HPC) is deemed to have a detectable disinfectant residual for purposes of determining compliance with this requirement. Thus, the value "V" in percent in the following formula cannot exceed 5.0% in one month, for any two consecutive months.

$V = (c + d + e) / (a + b) \text{ X } 100$

a = number of instances where the residual disinfectant concentration is measured;

b = number of instances where the residual disinfectant concentration is not measured but HPC is measured;

c = number of instances where the residual disinfectant concentration is measured but not detected and no HPC is measured;

d = number of instances where no residual disinfectant concentration is detected and where the HPC is greater than 500/mL; and

e = number of instances where the residual disinfectant concentration s not measured and HPC is greater than 500/mL.

d. The commissioner may determine, based on site-specific considerations, that an owner has no means for having a sample transported and analyzed for HPC by a certified laboratory under the requisite time and temperature conditions and the waterworks is providing adequate disinfection in the distribution system, that the requirements of subdivision B 1 c of this section does not apply.

2. Filtration. (Also see 12VAC5-590-880.) All waterworks that use a surface water source or a groundwater source under the direct influence of surface water shall provide filtration treatment by using one of the following methods:

a. Conventional filtration or direct filtration.

(1) Achieve a filtered water turbidity of less than or equal to 0.3 NTU in at least 95% of the measurements taken each month. Samples shall be representative of the waterworks' filtered water.

(2) The turbidity level of representative samples of a system's filtered water shall at no time exceed 1 NTU, measured as specified in 12VAC5-590-440.

(3) A system that uses lime softening may acidify representative samples prior to analysis using a protocol approved by the commissioner.

b. Slow sand filtration.

(1) The turbidity level of representative samples of a waterworks' filtered water shall be less than or equal to one NTU in at least 95% of the measurements taken each month, except that if the commissioner determines there is no significant interference with disinfection at a higher turbidity level, the commissioner may substitute this higher turbidity limit for that waterworks.

(2) The turbidity level of representative samples of a waterworks' filtered water shall at no time exceed five NTU.

c. Diatomaceous earth filtration.

(1) The turbidity level of representative samples of a waterworks' filtered water shall be less than or equal to one NTU in at least 95% of the measurements taken each month.

(2) The turbidity level of representative samples of a waterworks' filtered water shall at no time exceed five NTU.

d. Other filtration technologies. An owner may use a filtration technology not listed in subdivisions 2 a through c of this subsection if the owner demonstrates to the commissioner (by pilot plant studies or other means) that the alternative filtration technology, in combination with disinfection treatment, achieves 99.9% removal (3-log) and/or inactivation of Giardia lamblia cysts, 99.99% removal (4-log) and/or inactivation of viruses, and 99% removal (2-log) of Cryptosporidium oocysts. For an owner that makes this demonstration, a turbidity limit of representative samples of a waterworks' filtered water, not to exceed 0.3 NTU, shall be established by the commissioner, which the waterworks must meet at least 95% of the time. In addition, the commissioner shall establish a maximum turbidity limit of representative samples of a waterworks' filtered water, not to exceed 1 NTU that the waterworks must not exceed at any time. These turbidity limits shall consistently achieve the removal rates and/or inactivation rates stated in this subdivision.

e. Each waterworks using a surface water source or groundwater source under the direct influence of surface water shall be operated by licensed operators of the appropriate classification as per the Virginia Board for Waterworks and Wastewater Works Operators Regulations (18VAC155-20).

f. If the commissioner has determined that a waterworks has a surface water source or a groundwater source under the direct influence of surface water, filtration is required. The waterworks shall provide disinfection during the interim before filtration is installed as follows:

(1) The residual disinfectant concentration in the distribution system shall not be less than 2.0 mg/L for more than four hours.

(2) The owner shall issue continuing boil water notices through the public notification procedure in 12VAC5-590-540 until such time as the required filtration equipment is installed.

(3) As an alternative to subdivisions B f 2 (1) and (2) of this section, the owner may demonstrate that the source can meet the appropriate C-T values shown in Appendix L and be considered to satisfy the requirements for 99.9% removal of Giardia cysts and virus, respectively. In addition, the waterworks owner shall comply with the following:

(a) Justify that other alternative sources of supply meeting these regulations are not immediately available.

(b) Analysis of the source is performed quarterly for the contaminants listed in Tables 2.2, 2.3, and 2.4. The primary maximum contaminant levels shall not be exceeded.

(c) Daily turbidity monitoring and maintenance of the turbidity level not to exceed five NTU.

(d) MPN analysis of the raw water based on the minimum sample frequency chart below:

Population Served	Coliform Samples/Week
≤500	1
501 - 3,300	2
3,301 - 10,000	3
10,001 - 25,000	4
>25,000	5

Note: Shall be taken on separate days.

(e) Bacteriological sampling of the distribution system at a frequency of twice that required by Table 2.1.

3. Enhanced filtration and disinfection for Cryptosporidium – All waterworks using a surface water source or a groundwater source under the direct influence of surface water shall comply with the following requirements based on their population or if the waterworks is a wholesaler, based on the population of the largest waterworks in the combined distribution system:

a. Owners shall conduct an initial and a second round of source water monitoring for each plant that treats a surface water or groundwater under the direct influence of surface water source. This monitoring may include sampling for Cryptosporidium, E. coli, and turbidity to determine what level, if any, of additional Cryptosporidium treatment is required.

(1) Initial round of source water monitoring. Owners shall conduct the following monitoring on the schedule in subdivision B 3 a (3) of this section unless they meet the monitoring avoidance criteria in subdivision B 3 a (4) of this section.

(a) Owners of waterworks serving at least 10,000 people shall sample their source water for Cryptosporidium, E. coli, and turbidity at least monthly for 24 months.

(b) Owners of waterworks serving fewer than 10,000 people:

(i) shall sample their source water for E. coli at least once every two weeks for 12 months, or

(ii) may avoid E. coli monitoring if the waterworks notifies the commissioner that it will monitor for Cryptosporidium as described in paragraph (c) of this section. The owner shall notify the commissioner no later than three months prior to the date the waterworks is otherwise required to start E. coli monitoring.

(c) Owners of waterworks serving fewer than 10,000 people shall sample their source water for Cryptosporidium at least twice per month for 12 months or at least monthly for 24 months if they meet one of the following, based on monitoring conducted under subdivision B 3 a (1) (b) of this section:

(i) For waterworks using lake/reservoir sources, the annual mean E. coli concentration is greater than 10 E. coli/100 mL.

(ii) For waterworks using flowing stream sources, the annual mean E. coli concentration is greater than 50 E. coli/100 mL.

(iii) The waterworks does not conduct E. coli monitoring as described in paragraph (1) (b) of this section.

(iv) Waterworks using ground water under the direct influence of surface water shall comply with the requirements of subdivision B 3 a (1) (c) of this section based on the E. coli level that applies to the nearest surface water body. If no surface water body is nearby, the waterworks shall comply based on the requirements that apply to waterworks using lake/reservoir sources.

(d) For waterworks serving fewer than 10,000 people, the commissioner may approve monitoring for an indicator other than E. coli under subdivision B 3 a (1) (b) (i) of this section. The commissioner also may approve an alternative to the E. coli concentration in subdivision B 3 a (1) (c) (i), (ii) or (iv) of this section to trigger Cryptosporidium monitoring. This approval by the commissioner shall be provided to the waterworks in writing and shall include the basis for the ~~commission's~~ commissioner's determination that the alternative indicator and/or trigger level will provide a more accurate identification of whether a waterworks will exceed the Bin 1 Cryptosporidium level in subdivision B 3 c (1) (a) of this section.

(e) Waterworks may sample more frequently than required under this section if the sampling frequency is evenly spaced throughout the monitoring period.

(2) Second round of source water monitoring: Owners shall conduct a second round of source water monitoring that meets the requirements for monitoring parameters, frequency, and duration described in subdivision B 3 a (1) of this section, unless they meet the monitoring exemption criteria in subdivision B 3 a (4) of this section. Owners shall conduct this monitoring on the schedule in subdivision B 3 a (3) of this section.

(3) Monitoring schedule. Owners shall begin the monitoring required in subdivisions B 3 a (1) and (2) of this section no later than the month beginning with the date listed in the following table:

Source Water Monitoring Starting Dates Table

Owners of waterworks that serve...	Shall begin the first round of source water monitoring no later than the month beginning...	And shall begin the second round of source water monitoring no later than the month beginning...
At least 100,000 people	October 1, 2006	April 1, 2015
From 50,000 to 99,999 people	April 1, 2007	October 1, 2015
From 10,000 to 49,999 people	April 1, 2008	October 1, 2016
Fewer than 10,000 and monitor for E. coli	October 1, 2008	October 1, 2017
Fewer than 10,000 and monitor for Cryptosporidium[1]	April 1, 2010	April 1, 2019

[1]Applies to waterworks that meet the conditions of subdivision B 3 a (1) (c) of this section.

(4) Monitoring avoidance.

(a) Owners are not required to conduct source water monitoring under subdivision C 3 a of this section if the waterworks will provide a total of at least 5.5-log of treatment for Cryptosporidium, equivalent to meeting the treatment requirements of Bin 4 in subdivision B 3 c (2) of this section.

(b) If an owner chooses to provide the level of treatment in subdivision B 3 a (4) (a) of this section, rather than start source water monitoring, the owners shall notify the commissioner in writing no later than the date the owner is otherwise required to submit a sampling schedule for monitoring under subdivision B 3 a (5) of this section. Alternatively, an owner may choose to stop sampling at any point after the owner has initiated monitoring if the owner notifies the commissioner in writing that it will provide this level of treatment. Owners shall install and operate technologies to provide this level of treatment by the applicable treatment compliance date in subdivision B 3 c (3).

(5) Sampling schedules.

(a) Owners of waterworks required to conduct source water monitoring in accordance with subdivision B 3 a shall submit a sampling schedule that specifies the calendar dates when the owner shall collect each required sample.

(i) Owners shall submit sampling schedules to the commissioner no later than three months prior to the applicable date listed in subdivision B 3 a (3) for each round of required monitoring.

(ii) If the commissioner does not respond to an owner regarding the sampling schedule, the owner shall sample at the reported schedule.

(b) Owners shall collect samples within two days before or two days after the dates indicated in their sampling schedule (i.e., within a five-day period around the schedule date) unless one of the conditions of the following paragraphs apply.

(i) If an extreme condition or situation exists that may pose danger to the sample collector, or that cannot be avoided and causes the owner to be unable to sample in the scheduled five-day period, the owner shall sample as close to the scheduled date as is feasible unless the commissioner approves an alternative sampling date. The owner shall submit an explanation for the delayed sampling date to the commissioner concurrent with the shipment of the sample to the laboratory.

(ii) If an owner is unable to report a valid analytical result for a scheduled sampling date due to equipment failure, loss of or damage to the sample, failure to comply with the analytical method requirements, including the quality control requirements of 12VAC5-590-440, or the failure of an approved laboratory to analyze the sample, then the owner shall collect a replacement sample. The owner shall collect the replacement sample not later than 21 days after receiving information that an analytical result cannot be reported for the scheduled date unless the owner demonstrates that collecting a replacement sample within this time frame is not feasible or the commissioner approves an alternative resampling date. The owner shall submit an explanation for the delayed sampling date to the commissioner concurrent with the shipment of the sample to the laboratory.

(c) Owners of waterworks that fail to meet the criteria of subdivision B 3 a (5) (b) of this section for any source water sample required under subdivision B 3 a shall revise their sampling schedules to add dates for collecting all missed samples. Owners shall submit the revised schedule to the commissioner for approval prior to when the owner begins collecting the missed samples.

(6) Sampling locations.

(a) Owners of waterworks required to conduct source water monitoring under subdivision B 3 a shall collect samples for each plant that treats a surface water or groundwater under the direct influence of surface water source. Where multiple plants draw water from the same influent, such as the same pipe or intake, the commissioner may approve one set of monitoring results to be used to satisfy the requirements subdivision B 3 a for all plants.

(b) Owners shall collect source water samples prior to chemical treatment, such as coagulants, oxidants and disinfectants. However, the commissioner may approve the collection of a source water sample after chemical treatment. To grant this approval, the commissioner shall determine that collecting a sample prior to chemical treatment is not feasible for the waterworks and that the chemical treatment is unlikely to have a significant adverse effect on the analysis of the sample.

(c) Owners of waterworks that recycle filter backwash water shall collect source water samples prior to the point of filter backwash water addition.

(d) Bank filtration.

(i) Waterworks that receive Cryptosporidium treatment credit for bank filtration under 12VAC5-590-420 B 2 d, shall collect source water samples in the surface water prior to bank filtration.

(ii) Waterworks that use bank filtration as pretreatment to a filtration plant shall collect source water samples from the well (i.e., after bank filtration). Use of bank filtration during monitoring shall be consistent with routine

operational practice. Waterworks collecting samples after a bank filtration process may not receive treatment credit for the bank filtration under subdivision B 3 d (4) (c) of this section.

(e) Multiple sources. Owners of waterworks with plants that use multiple water sources, including multiple surface water sources and blended surface water and ground water sources shall collect samples as specified in subdivision B 3 a (6) (e) (i) or (ii) of this section. The use of multiple sources during monitoring shall be consistent with routine operational practice.

(i) If a sampling tap is available where the sources are combined prior to treatment, waterworks shall collect samples from the tap.

(ii) If a sampling tap where the sources are combined prior to treatment is not available, owners shall collect samples at each source near the intake on the same day and shall follow either subdivision B 3 a (6) (e) (ii) ((a)) or ((b)) of this section for sample analysis.

((a)) Owners may composite samples from each source into one sample prior to analysis. The volume of sample from each source shall be weighted according to the proportion of the source in the total plant flow at the time the sample is collected.

((b)) Owners may analyze samples from each source separately and calculate a weighted average of the analysis results for each sampling date. The weighted average shall be calculated by multiplying the analysis result for each source by the fraction the source contributed to total plant flow at the time the sample was collected and then summing these values.

(f) Additional Requirements. Owners shall submit a description of their sampling location(s) to the commissioner at the same time as the sampling schedule required in subdivision B 3 a (3) of this section. This description shall address the position of the sampling location in relation to the waterworks water source(s) and treatment processes, including pretreatment, points of chemical treatment, and filter backwash recycle. If the commissioner does not respond to an owner regarding sampling location(s), the owner shall sample at the reported location(s).

(7) Analytical methods. All analytical methods shall be conducted in accordance with 12VAC5-590-440.

(8) Approved laboratories.

(a) Cryptosporidium. Owners shall have Cryptosporidium samples analyzed by a laboratory that is approved under EPA's Laboratory Quality Assurance Evaluation Program for Analysis of Cryptosporidium in Water or a laboratory that has been certified for Cryptosporidium analysis by an equivalent state laboratory certification program.

(b) E. coli. Any laboratory certified by the state for total coliform or fecal coliform analysis under 12VAC5-590-440 is approved for E. coli analysis when the laboratory uses the same technique for E. coli that the laboratory uses under 12VAC5-590-440. Laboratories shall use methods for enumeration of E. coli in source water approved in 12VAC5-590-440.

(c) Turbidity. Measurements of turbidity shall be made by a party approved by the commissioner.

(9) Reporting of the source water results shall be in accordance with 12VAC5-590-530.

(10) Plants operating only part of the year. Owners of waterworks treating surface water or groundwater under the direct influence of surface water that operates for only part of the year shall conduct source water monitoring in accordance with this section, but with the following modifications:

(a) Owners shall sample their source water only during the months that the plant operates unless the commissioner specifies another monitoring period based on plant operating practices.

(b) Owners of waterworks with plants that operate less than six months per year and that monitor for Cryptosporidium shall collect at least six Cryptosporidium samples per year during each of two years of monitoring. Samples shall be evenly spaced throughout the period the plant operates.

(11) New sources;

(a) Owners of waterworks that begin using a new source of surface water or groundwater under the direct influence of surface water after the waterworks is required to begin monitoring under subdivision B 3 a (3) of this section shall monitor the new source on a schedule the commissioner approves. Source water monitoring shall meet the requirements of this section. The owner shall also meet the bin classification and Cryptosporidium treatment requirements of subdivision B 3 c (1) and (2) of this section, for the new source on a schedule the commissioner approves.

(b) The requirements of this section apply to waterworks using surface water or groundwater under the direct influence of surface water that begin operation after the monitoring start date applicable to the waterworks size under subdivision B 3 a (3) of this section.

(c) The owner shall begin a second round of source water monitoring no later than six years following initial bin classification under in subdivision B 3 c (1) of this section.

(12) Failure to collect any source water sample required under this section in accordance with the sampling schedule, sampling location, analytical method, approved laboratory, and reporting requirements of subdivision B 3 a (5), (6), (7), (8), or (9) of this section is a monitoring violation.

(13) Grandfathering monitoring data. Owners may use (grandfather) monitoring data collected prior to the applicable monitoring start date in subdivision B 3 a (3) of this section to meet the initial source water monitoring requirements in subdivision B 3 a (1) of this section. Grandfathered data may substitute for an equivalent number of months at the end of the monitoring period. All data submitted under this paragraph shall meet the requirements in (13) (a) through (h) listed below and be approved by the commissioner:

(a) An owner may grandfather Cryptosporidium samples to meet the requirements of this section when the owner does not have corresponding E. coli and turbidity samples. A waterworks that grandfathers Cryptosporidium samples without E. coli and turbidity samples is not required to collect E. coli and turbidity samples when the system completes the requirements for Cryptosporidium monitoring under this section.

(b) E. coli sample analysis. The analysis of E. coli samples shall meet the analytical method and approved laboratory requirements of subdivision B 3 a (7) and (8) of this section.

(c) Cryptosporidium sample analysis. The analysis of Cryptosporidium samples shall meet the requirements of subdivision B 3 a (8) of this section.

(d) Sampling location. The sampling location shall meet the conditions in subdivision B 3 a (6) of this section.

(e) Sampling frequency. Cryptosporidium samples were collected no less frequently than each calendar month on a regular schedule, beginning no earlier than January 1999. Sample collection intervals may vary for the conditions specified in subdivision B 3 a (5) (b) (i) and (ii) of this section, if the owner provides documentation of the condition when reporting monitoring results.

(i) The commissioner may approve grandfathering of previously collected data where there are time gaps in the sampling frequency if the owner conducts additional monitoring the commissioner specifies to ensure that the data used to comply with the initial source water monitoring requirements of subdivision B 3 a of this section are seasonally representative and unbiased.

(ii) Owners may grandfather previously collected data where the sampling frequency within each month varied. If the Cryptosporidium sampling frequency varied, owners shall follow the monthly averaging procedure in subdivision B 3 c (1) (a) (v) of this section, when calculating the bin classification for filtered systems.

(f) Reporting monitoring results for grandfathering. Owners that request to grandfather previously collected monitoring results shall report the following information by the applicable dates listed in the following paragraphs. Owners shall report this information to the commissioner.

(i) Owners shall report that they intend to submit previously collected monitoring results for grandfathering. This report shall specify the number of previously collected results the owner shall submit, the dates of the first and last sample, and whether an owner shall conduct additional source water monitoring to meet the requirements in subdivision B 3 a of this section. Owners shall report this information no later than the date the sampling schedule listed in subdivision B 3 a (3) of this section is required.

(ii) Owners shall report previously collected monitoring results for grandfathering, along with the associated documentation listed in paragraphs ((a)) through ((d)) listed below, no later than two months after the applicable date listed in subdivision B 3 a (3) of this section.

((a)) For each sample result, owners shall report the applicable data elements in 12VAC5-590-530 C 1 c.

((b)) Owners shall certify that the reported monitoring results include all results the waterworks generated during the time period beginning with the first reported result and ending with the final reported result. This applies to samples that were collected from the sampling location specified for source water monitoring under subdivision B 3 a (13) (f) of this section, not spiked, and analyzed using the laboratory's routine process for the analytical methods listed in this section.

((c)) Owners shall certify that the samples were representative of a plant's source water(s) and the source water(s) have not changed. Owners shall report a description of the sampling location(s), which shall address the position of the sampling location in relation to the waterworks' water source(s) and treatment processes, including points of chemical addition and filter backwash recycle.

((d)) For Cryptosporidium samples, the laboratory or laboratories that analyzed the samples shall provide a letter certifying that the quality control criteria specified in the methods listed in subdivision B 3 a (8) of this section were met for each sample batch associated with the reported results. Alternatively, the laboratory may provide bench sheets and sample examination report forms for each field, matrix spike, IPR, OPR, and method blank sample associated with the reported results.

(g) If the commissioner determines that a previously collected data set submitted for grandfathering was generated during source water conditions that were not normal for the waterworks, such as a drought, the commissioner may disapprove the data. Alternatively, the commissioner may approve the previously collected data if the owner reports additional source water monitoring data, as determined by the commissioner, to ensure that the data set used under subdivision B 3 c (1) of this section represents average source water conditions for the waterworks.

(h) If an owner submits previously collected data that fully meets the number of samples required for initial source water monitoring under subdivision B 3 a (1) of this section and some of the data are rejected due to not meeting the requirements of this section, the owner shall conduct additional monitoring to replace rejected data on a schedule the commissioner approves. Owners are not required to begin this additional monitoring until two months after notification that data have been rejected and additional monitoring is necessary.

b. Owners of waterworks that plan to make a significant change to their disinfection practice shall develop disinfection profiles and calculate disinfection benchmarks, as described in subdivision B 3 a (1) and (2) below.

(1) Requirements when making a significant change in disinfection practice.

(a) Following the completion of initial source water monitoring under subdivision B 3 a (1) of this section, owners of waterworks that plan to make a significant change to its disinfection practice, as defined in subdivision B 3 b (1) (b) of this section, shall develop disinfection profiles and calculate disinfection benchmarks for Giardia lamblia and viruses as described in subdivision B 3 b (2) of this section. Prior to changing the disinfection practice, the owner shall notify the commissioner and shall include in this notice the information in subdivision B 3 b (1) a) (i) through (iii) of this section.

(i) A completed disinfection profile and disinfection benchmark for Giardia lamblia and viruses as described in subdivision B 3 b (2) of this section.

(ii) A description of the proposed change in disinfection practice.

(iii) An analysis of how the proposed change will affect the current level of disinfection.

(b) Significant changes to disinfection practice are defined as follows:

(i) Changes to the point of disinfection;

(ii) Changes to the disinfectant(s) used in the treatment plant;

(iii) Changes to the disinfection process; or

(iv) Any other modification identified by the commissioner as a significant change to disinfection practice.

(2) Developing the disinfection profile and benchmark.

(a) Owners of waterworks required to develop disinfection profiles in accordance with subdivision B 3 b (1) of this section shall follow the requirements of this section. Owners shall monitor at least weekly for a period of 12 consecutive months to determine the total log inactivation for Giardia lamblia and viruses. If owners monitor more frequently, the monitoring frequency shall be evenly spaced. Owners of waterworks that operate for fewer than 12 months per year shall monitor weekly during the period of operation. Owners shall determine log inactivation for Giardia lamblia through the entire plant, based on CT99.9 values in Appendix L. Owners shall determine log inactivation for viruses through the entire treatment plant based on a protocol approved by the commissioner.

(b) Owners of waterworks with a single point of disinfectant application prior to the entrance to the distribution system shall conduct the monitoring in subdivision B 3 b (2) (b) (i) through (iv) of this section. Owners of waterworks with more than one point of disinfectant application shall conduct the monitoring in subdivision B 3 b (2) (b) (i) through (iv) of this section for each disinfection segment. Owners shall monitor the parameters necessary to determine the total inactivation ratio, using analytical methods in Appendix L.

(i) For waterworks using a disinfectant other than UV, the temperature of the disinfected water shall be measured at each residual disinfectant concentration sampling point during peak hourly flow or at an alternative location approved by the commissioner.

(ii) For waterworks using chlorine, the pH of the disinfected water shall be measured at each chlorine residual disinfectant concentration sampling point during peak hourly flow or at an alternative location approved by the commissioner.

(iii) The disinfectant contact time(s) (t) shall be determined during peak hourly flow.

(iv) The residual disinfectant concentration(s) (C) of the water before or at the first customer and prior to each additional point of disinfectant application shall be measured during peak hourly flow.

(c) In lieu of conducting new monitoring under subdivision B 3 b (2) (b) of this section, owners may

elect to meet the requirements of subdivision B 3 b (2) (c) (i) or (ii) of this section.

(i) Owners of waterworks that have at least one year of existing data that are substantially equivalent to data collected under the provisions of subdivision B 3 b (2) (b) of this section may use these data to develop disinfection profiles as specified in this section if the owner has neither made a significant change to its treatment practice nor changed sources since the data were collected. Owners may develop disinfection profiles using up to three years of existing data.

(ii) Owners may use disinfection profile(s) developed under 12VAC5-590-500 E 2 in lieu of developing a new profile if the owner has neither made a significant change to its treatment practice nor changed sources since the profile was developed. Owners that have not developed a virus profile under 12VAC5-590-500 E 2 shall develop a virus profile using the same monitoring data on which the Giardia lamblia profile is based.

(d) Owners of waterworks shall calculate the total inactivation ratio for Giardia lamblia as specified in subdivision B 3 b (2) (d) (i) through (iii) of this section.

(i) Owners of waterworks using only one point of disinfectant application may determine the total inactivation ratio for the disinfection segment based on either of the methods in subdivision B 3 b (2) (d) (i) ((a)) or ((b)) of this section.

((a)) Determine one inactivation ratio (CTcalc/CT99.9) before or at the first customer during peak hourly flow.

((b)) Determine successive CTcalc/CT99.9 values, representing sequential inactivation ratios, between the point of disinfectant application and a point before or at the first customer during peak hourly flow. The owner shall calculate the total inactivation ratio by determining (CTcalc/CT99.9) for each sequence and then adding the (CTcalc/CT99.9) values together to determine (Σ (CTcalc/CT99.9)).

(ii) Owners of waterworks using more than one point of disinfectant application before the first customer shall determine the CT value of each disinfection segment immediately prior to the next point of disinfectant application, or for the final segment, before or at the first customer, during peak hourly flow. The (CTcalc/CT99.9) value of each segment and (Σ (CTcalc/CT99.9)) shall be calculated using the method in paragraph (i) ((b)) of this section.

(iii) The owner shall determine the total logs of inactivation by multiplying the value calculated in subdivision B 3 b (2) (d) (i) or (ii) of this section by 3.0.

(iv) Owners shall calculate the log of inactivation for viruses using a protocol approved by the commissioner.

(e) Owners shall use the procedures specified in (i) and (ii) listed below to calculate a disinfection benchmark.

(i) For each year of profiling data collected and calculated under subdivision B 3 b (2) (a) through (d) of this section, owners shall determine the lowest mean monthly level of both Giardia lamblia and virus inactivation. Owners shall determine the mean Giardia lamblia and virus inactivation for each calendar month for each year of profiling data by dividing the sum of daily or weekly Giardia lamblia and virus log inactivation by the number of values calculated for that month.

(ii) The disinfection benchmark is the lowest monthly mean value (for waterworks with one year of profiling data) or the mean of the lowest monthly mean values (for waterworks with more than one year of profiling data) of Giardia lamblia and virus log inactivation in each year of profiling data.

c. Owners shall determine their Cryptosporidium treatment bin classification as described in subdivision B 3 c (1) and provide additional treatment for Cryptosporidium, if required, as described in subdivision B 3 c (2). Owners shall implement Cryptosporidium treatment according to the schedule in subdivision B 3 c (3).

(1) Bin classification for waterworks.

(a) Following completion of the initial round of source water monitoring required under subdivision B 3 a (1), owners shall calculate an initial Cryptosporidium bin concentration for each plant for which monitoring was required. Calculation of the bin concentration shall use the Cryptosporidium results reported under subdivision B 3 a (1) and shall follow these procedures:

(i) For waterworks that collect a total of at least 48 samples, the bin concentration is equal to the arithmetic mean of all sample concentrations.

(ii) For waterworks that collect a total of at least 24 samples, but not more than 47 samples, the bin concentration is equal to the highest arithmetic mean of all sample concentrations in any 12 consecutive months during which Cryptosporidium samples were collected.

(iii) For waterworks that serve fewer than 10,000 people and monitor for Cryptosporidium for only one year (i.e., collect 24 samples in 12 months), the bin concentration is equal to the arithmetic mean of all sample concentrations.

(iv) For waterworks with plants operating only part of the year that monitor fewer than 12 months per year under subdivision B 3 a (1), the bin concentration is equal to the highest arithmetic mean of all sample concentrations during any year of Cryptosporidium monitoring.

(v) If the monthly Cryptosporidium sampling frequency varies, owners shall first calculate a monthly average for each month of monitoring. Owners shall then use these monthly average concentrations, rather than individual sample concentrations, in the applicable calculation for bin classification in subdivision B 3 c (1) (a) (i) through (iv) of this section.

(b) Owners shall determine their initial bin classification from the following table and using the Cryptosporidium bin concentration calculated under subdivision B 3 c (1) (a) of this section:

Bin Classification Table for Filtered Systems

For owners of waterworks that are:	with a Cryptosporidium bin concentration of[1] ...	The bin classification is...
...required to monitor for Cryptosporidium under subdivision B 3 a (1)	Cryptosporidium less than 0.075 oocysts/L	Bin 1
	Cryptosporidium equal to or greater than 0.075 oocysts/L but less than 1.0 oocysts/L	Bin 2
	Cryptosporidium equal to or greater than 1.0 oocysts/L but less than 3.0 oocysts/L	Bin 3
	Cryptosporidium equal to or greater than 3.0 oocysts/L	Bin 4
...serving fewer than 10,000 people and NOT required to monitor for Cryptosporidium under B 3 a (1)(c)	NA	Bin 1

[1]Based on calculations in subdivision B 3 c (1) (a) or (c) of this section, as applicable

(c) Following completion of the second round of source water monitoring required under subdivision B 3 a (2), owners shall recalculate their Cryptosporidium bin concentration using the Cryptosporidium results reported under subdivision B 3 a (2) and following the procedures in subdivision B 3 c (1) (a)(i) through (iv) of this section. Owners shall then redetermine their bin classification using this bin concentration and the table in subdivision B 3 c (1) (b) of this section.

(d) Reporting of bin classifications

(i) Owners shall report their initial bin classification under subdivision B 3 c (1) (b) of this section to the commissioner for approval no later than six months after the waterworks is required to complete initial source water monitoring based on the schedule in subdivision B 3 a (3).

(ii) Owners shall report their bin classification under subdivision B 3 c (1) (c) of this section to the commissioner for approval no later than six months after the owner is required to complete the second round of source water monitoring based on the schedule in subdivision B 3 c (1) 3 a (3) of this section.

(iii) The bin classification report to the commissioner shall include a summary of source water monitoring data and the calculation procedure used to determine bin classification.

(e) Failure to comply with the conditions of subdivision B 3 c (1) (d) of this section is a violation of the treatment technique requirement.

(2) Waterworks additional Cryptosporidium treatment requirements.

(a) Waterworks shall provide the level of additional treatment for Cryptosporidium specified in this paragraph based on their bin classification as determined under subdivision B 3 c (1) of this section and according to the schedule in subdivision B 3 c (3) (b) of this section.

If the waterworks bin classification is...	And the waterworks uses the following filtration treatment in full compliance with 12VAC5-590-420 A and B, then the additional Cryptosporidium treatment requirements are...			
	Conventional filtration treatment (including softening)	Direct filtration	Slow sand or diatomaceous earth filtration	Alternative filtration technologies
Bin 1	No additional treatment	No additional treatment	No additional treatment	No additional treatment
Bin 2	1-log treatment	1.5-log treatment	1-log treatment	(1)
Bin 3	2-log treatment	2.5-log treatment	2-log treatment	(2)
Bin 4	2.5-log treatment	3-log treatment	2.5-log treatment	(3)

[1]As determined by the commissioner such that the total Cryptosporidium removal and inactivation is at least 4.0-log

[2]As determined by the commissioner such that the total Cryptosporidium removal and inactivation is at least 5.0-log

[3]As determined by the commissioner such that the total Cryptosporidium removal and inactivation is at least 5.5-log

(b) Additional treatment

(i) Owners shall use one or more of the treatment and management options listed in subdivision B 3 d, termed the microbial toolbox, to comply with the additional Cryptosporidium treatment required in subdivision B 3 c (2) (a) of this section.

(ii) Waterworks classified in Bin 3 and Bin 4 shall achieve at least 1-log of the additional Cryptosporidium treatment required under subdivision B 3 c (2) (a) of this section using either one or a combination of the following: bag filters, bank filtration, cartridge filters, chlorine dioxide, membranes, ozone, or UV, as described in subdivision B 3 d (3) through (7) of this section.

(c) Failure by a waterworks in any month to achieve treatment credit by meeting criteria in subdivision B 3 d (3) through (7) of this section for microbial toolbox options that is at least equal to the level of treatment required in subdivision B 3 c (2) (a) of this section is a violation of the treatment technique requirement.

(d) If the commissioner determines during a sanitary survey or an equivalent source water assessment that after a waterworks completed the monitoring conducted under subdivision B 3 a (1) or (2) of this section, significant changes occurred in the waterworks' watershed that could lead to increased contamination of the source water by Cryptosporidium, the owner shall take actions specified by the commissioner to address the contamination. These actions may include additional source water monitoring and/or implementing microbial toolbox options listed in subdivision B 3 d (2) of this section.

(3) Schedule for compliance with Cryptosporidium treatment requirements.

(a) Following initial bin classification in accordance with subdivision B 3 c (1) (b) of this section, waterworks shall provide the level of treatment for Cryptosporidium required under subdivision B 3 c (2) of this section according to the schedule in subdivision B 3 c (3) (b) of this section.

(b) Cryptosporidium treatment compliance dates.

Cryptosporidium Treatment Compliance Dates Table

Waterworks that serve....	Shall comply with Cryptosporidium treatment requirements no later than[1]...
At least 100,000 people	April 1, 2012
From 50,000 to 99,999 people	October 1, 2012
From 10,000 to 49,999 people	October 1, 2013
Fewer than 10,000 people	October 1, 2014

[1]The commissioner may allow up to an additional two years for complying with the treatment requirement for waterworks making capital improvements.

(c) If the bin classification for a filtered system changes following the second round of source water monitoring, as determined under subdivision B 3 c (1) (c) of this section, the waterworks shall provide the level of treatment for Cryptosporidium required under

subdivision B 3 c (2) of this section on a schedule the commissioner approves.

d. Owners of waterworks required to provide additional treatment for Cryptosporidium shall implement microbial toolbox options that are designed and operated as described in subdivision B 3 d (1) through (7) of this section.

(1) Waterworks receive the treatment credits listed in the table in subdivision B 3 d (2) of this section by meeting the conditions for microbial toolbox options described in subdivision B 3 d (3) through (7) of this section. Waterworks apply these treatment credits to meet the treatment requirements in subdivision B 3 c (2) of this section.

(2) Microbial Toolbox Summary Table: Options, Treatment Credits and Criteria

Microbial Toolbox Summary Table: Options, Treatment Credits and Criteria

Toolbox Option	Cryptosporidium treatment credit with design and implementation criteria
Source Protection and Management Toolbox Options	
~~Watershed control program~~	~~0.5-log credit for program approved by the commissioner comprising required elements, annual program status report to the commissioner, and regular watershed survey. Specific criteria are in subdivision B 3 d (3) (a)~~
Alternative source/ intake management	No prescribed credit. Owners may conduct simultaneous monitoring for treatment bin classification at alternative intake locations or under alternative intake management strategies. Specific criteria are in subdivision B 3 d (3) (b).
Pre Filtration Toolbox Options	
Presedimentation basin with coagulation	0.5-log credit during any month that presedimentation basins achieve a monthly mean reduction of 0.5-log or greater in turbidity or alternative performance criteria approved by the commissioner. To be eligible, basins shall be operated continuously with coagulant addition and all plant flow shall pass through basins. Specific criteria are in subdivision B 3 d (4) (a)
Two-stage lime softening	0.5-log credit for two-stage softening where chemical addition and hardness precipitation occur in both stages. All plant flow shall pass through both stages. Single-stage softening is credited as equivalent to conventional treatment. Specific criteria are in subdivision B 3 d (4) (b).
Bank filtration	0.5-log credit for 25-foot setback; 1.0-log credit for 50-foot setback; aquifer shall be unconsolidated sand containing at least 10% fines; average turbidity in wells shall be less than 1 NTU. Waterworks using wells followed by filtration when conducting source water monitoring shall sample the well to determine bin classification and are not eligible for additional credit. Specific criteria are in subdivision B 3 d (4) (c).
Treatment Performance Toolbox Options	
Combined filter performance	0.5-log credit for combined filter effluent turbidity less than or equal to 0.15 NTU in at least 95% of measurements each month. Specific criteria are in subdivision B 3 d (5) (a).
Individual filter performance	0.5-log credit (in addition to 0.5-log combined filter performance credit) if individual filter effluent turbidity is less than or equal to 0.15 NTU in at least 95% of samples each month in each filter and is never greater than 0.3 NTU in two consecutive measurements in any filter. Specific criteria are in subdivision B 3 d (5) (b).
Additional Filtration Toolbox Options	
Bag or cartridge filters (individual filters)	Up to 2-log credit based on the removal efficiency demonstrated during challenge testing with a 1.0-log factor of safety. Specific criteria are in subdivision B 3 d (6) (a).
Bag or cartridge filters (in series)	Up to 2.5-log credit based on the removal efficiency demonstrated during challenge testing with a 0.5-log factor of safety. Specific criteria are in subdivision B 3 d (6) (a).

Membrane filtration	Log credit equivalent to removal efficiency demonstrated in challenge test for device if supported by direct integrity testing. Specific criteria are in subdivision B 3 d (6) (b).
Second stage filtration	0.5-log credit for second separate granular media filtration stage if treatment train includes coagulation prior to first filter. Specific criteria are in subdivision B 3 d (6) (c).
Slow sand filters	2.5-log credit as a secondary filtration step; 3.0-log credit as a primary filtration process. No prior chlorination for either option. Specific criteria are in subdivision B 3 d (6) (d).
Inactivation Toolbox Options	
Chlorine dioxide	Log credit based on measured CT in relation to CT table. Specific criteria in subdivision B 3 d (7) (b).
Ozone	Log credit based on measured CT in relation to CT table. Specific criteria in subdivision B 3 d (7) (b).
UV	Log credit based on validated UV dose in relation to UV dose table; reactor validation testing required to establish UV dose and associated operating conditions. Specific criteria in subdivision B 3 d (7) (d).

(3) Source toolbox components.

~~(a) Watershed control program. Waterworks receive 0.5-log Cryptosporidium treatment credit for implementing a watershed control program that meets the requirements of this section.~~

~~(i) Owners that intend to apply for the watershed control program credit shall notify the commissioner of this intent no later than two years prior to the treatment compliance date applicable to the waterworks in subdivision B 3 a (3) of this section.~~

~~(ii) Owners shall submit to the commissioner a proposed watershed control plan no later than one year before the applicable treatment compliance date in subdivision B 3 a (3) of this section. The commissioner shall approve the watershed control plan for the waterworks to receive watershed control program treatment credit. The watershed control plan shall include the following elements:~~

~~((a)) Identification of an "area of influence" outside of which the likelihood of Cryptosporidium or fecal contamination affecting the treatment plant intake is not significant. This is the area to be evaluated in future watershed surveys under subdivision B 3 d (3) (a) (v) ((b)) of this section.~~

~~((b)) Identification of both potential and actual sources of Cryptosporidium contamination and an assessment of the relative impact of these sources on the waterworks' source water quality.~~

~~((c)) An analysis of the effectiveness and feasibility of control measures that could reduce Cryptosporidium loading from sources of contamination to the waterworks' source water.~~

~~((d)) A statement of goals and specific actions the owner shall undertake to reduce source water Cryptosporidium levels. The plan shall explain how the actions are expected to contribute to specific goals, identify watershed partners and their roles, identify resource requirements and commitments, and include a schedule for plan implementation with deadlines for completing specific actions identified in the plan.~~

~~(iii) Waterworks with existing watershed control programs (i.e., programs in place on January 5, 2006) are eligible to seek this credit. Their watershed control plans shall meet the criteria in subdivision B 3 d (3) (a) (ii) of this section and shall specify ongoing and future actions that will reduce source water Cryptosporidium levels.~~

~~(iv) If the commissioner does not respond to an owner regarding approval of a watershed control plan submitted under this section and the owner meets the other requirements of this section, the watershed control program shall be considered approved and 0.5 log Cryptosporidium treatment credit shall be awarded unless and until the commissioner subsequently withdraws such approval.~~

~~(v) To maintain the 0.5 log credit, owners shall complete the following actions:~~

~~((a)) Submit an annual watershed control program status report to the commissioner. The annual watershed control program status report shall describe the owner's implementation of the approved plan and assess the adequacy of the plan to meet its goals. It shall explain how the waterworks is addressing any shortcomings in plan implementation, including those previously identified by the commissioner or as the result of the watershed survey conducted under subdivision B 3 d (3) (a) (v) ((b)) of this section. It shall also describe any significant changes that have occurred in the watershed since the last watershed sanitary survey. If an owner determines during implementation that making a~~

~~significant change to the approved watershed control program is necessary, the owner shall notify the commissioner prior to making any such changes. If any change is likely to reduce the level of source water protection, the owner shall also list in the notification the actions the owners will take to mitigate this effect.~~

~~((b)) Undergo a watershed sanitary survey every three years for community waterworks and every five years for noncommunity waterworks and submit the survey report to the commissioner. The survey shall be conducted according to commissioner's guidelines and by persons the commissioner approves.~~

~~((i)) The watershed sanitary survey shall meet the following criteria: encompass the region identified in the watershed control plan approved by the commissioner as the area of influence; assess the implementation of actions to reduce source water Cryptosporidium levels; and identify any significant new sources of Cryptosporidium.~~

~~((ii)) If the commissioner determines that significant changes may have occurred in the watershed since the previous watershed sanitary survey, the waterworks shall undergo another watershed sanitary survey by a date the commissioner requires, which may be earlier than the regular date in subdivision B 3 d (3) (a) (v) ((b)) of this section.~~

~~((c)) The owner shall make the watershed control plan, annual status reports, and watershed sanitary survey reports available to the public upon request. These documents shall be in a plain language style and include criteria by which to evaluate the success of the program in achieving plan goals. The commissioner may approve an owner to withhold from the public portions of the annual status report, watershed control plan, and watershed sanitary survey based on water supply security considerations.~~

~~(vi) If the commissioner determines that an owner is not carrying out the approved watershed control plan, the commissioner may withdraw the watershed control program treatment credit.~~

(a) Reserved.

(b) Alternative source.

(i) An owner may conduct source water monitoring that reflects a different intake location (either in the same source or for an alternate source) or a different procedure for the timing or level of withdrawal from the source (alternative source monitoring). If the commissioner approves, an owner may determine the bin classification under subdivision B 3 c (1) of this section based on the alternative source monitoring results.

(ii) If an owner conducts alternative source monitoring under subdivision B 3 d (3) (b) (i) of this section, the owner shall also monitor their current plant intake concurrently as described in subdivision B 3 a of this section.

(iii) Alternative source monitoring under subdivision B 3 d (3) (b) (i) of this section shall meet the requirements for source monitoring to determine bin classification, as described in subdivision B 3 a (1) through (13) of this section. Owners shall report the alternative source monitoring results to the commissioner, along with supporting information documenting the operating conditions under which the samples were collected.

(iv) If an owner determines the bin classification under subdivision B 3 c (1) of this section using alternative source monitoring results that reflect a different intake location or a different procedure for managing the timing or level of withdrawal from the source, the owner shall relocate the intake or permanently adopt the withdrawal procedure, as applicable, no later than the applicable treatment compliance date in subdivision B 3 c (3) of this section.

(4) Pre-filtration treatment toolbox components.

(a) Presedimentation. Waterworks receive 0.5-log Cryptosporidium treatment credit for a presedimentation basin during any month the process meets the following criteria:

(i) The presedimentation basin shall be in continuous operation and shall treat the entire plant flow taken from a surface water or groundwater under the direct influence of surface water source.

(ii) The waterworks shall continuously add a coagulant to the presedimentation basin.

(iii) The presedimentation basin shall achieve the performance criteria in either of the following.

((a)) Demonstrates at least 0.5-log mean reduction of influent turbidity. This reduction shall be determined using daily turbidity measurements in the presedimentation process influent and effluent and shall be calculated as follows: log10(monthly mean of daily influent turbidity) - log10(monthly mean of daily effluent turbidity).

((b)) Complies with performance criteria approved by the commissioner that demonstrate at least 0.5-log mean removal of micron-sized particulate material through the presedimentation process.

(b) Two-stage lime softening. Waterworks receive an additional 0.5-log Cryptosporidium treatment credit for a two-stage lime softening plant if chemical addition and hardness precipitation occur in two separate and

sequential softening stages prior to filtration. Both softening stages shall treat the entire plant flow taken from a surface water or groundwater under the direct influence of surface water source.

(c) Bank filtration. Waterworks receive Cryptosporidium treatment credit for bank filtration that serves as pretreatment to a filtration plant by meeting the criteria in this paragraph. Waterworks using bank filtration when they begin source water monitoring under subdivision B 3 a (1) of this section shall collect samples as described in subdivision B 3 a (6) (d) of this section and are not eligible for this credit.

(i) Wells with a ground water flow path of at least 25 feet receive 0.5-log treatment credit; wells with a ground water flow path of at least 50 feet receive 1.0-log treatment credit. The ground water flow path shall be determined as specified in subdivision B 3 d (c) (iv) of this section.

(ii) Only wells in granular aquifers are eligible for treatment credit. Granular aquifers are those comprised of sand, clay, silt, rock fragments, pebbles or larger particles, and minor cement. A waterworks shall characterize the aquifer at the well site to determine aquifer properties. Owners shall extract a core from the aquifer and demonstrate that in at least 90% of the core length, grains less than 1.0 mm in diameter constitute at least 10% of the core material.

(iii) Only horizontal and vertical wells are eligible for treatment credit.

(iv) For vertical wells, the ground water flow path is the measured distance from the edge of the surface water body under high flow conditions (determined by the 100-year floodplain elevation boundary or by the floodway, as defined in Federal Emergency Management Agency flood hazard maps) to the well screen. For horizontal wells, the ground water flow path is the measured distance from the bed of the river under normal flow conditions to the closest horizontal well lateral screen.

(v) Owners shall monitor each wellhead for turbidity at least once every four hours while the bank filtration process is in operation. If monthly average turbidity levels, based on daily maximum values in the well, exceed 1 NTU, the owner shall report this result to the commissioner and conduct an assessment within 30 days to determine the cause of the high turbidity levels in the well. If the commissioner determines that microbial removal has been compromised, the commissioner may revoke treatment credit until the owner implements corrective actions approved by the commissioner to remediate the problem.

(vi) Springs and infiltration galleries are not eligible for treatment credit under this section.

(vii) Bank filtration demonstration of performance. The commissioner may approve Cryptosporidium treatment credit for bank filtration based on a demonstration of performance study that meets the criteria in this paragraph. This treatment credit may be greater than 1.0-log and may be awarded to bank filtration that does not meet the criteria in subdivision B 3 d (4) (c) (i) through (v) of this section.

((a)) The study shall follow a protocol approved by the commissioner and shall involve the collection of data on the removal of Cryptosporidium or a surrogate for Cryptosporidium and related hydrogeologic and water quality parameters during the full range of operating conditions.

((b)) The study shall include sampling both from the production well(s) and from monitoring wells that are screened and located along the shortest flow path between the surface water source and the production well(s).

(5) Treatment performance toolbox components.

(a) Combined filter performance. Waterworks using conventional filtration treatment or direct filtration treatment receive an additional 0.5-log Cryptosporidium treatment credit during any month the waterworks meets the criteria in this paragraph. Combined filter effluent (CFE) turbidity shall be less than or equal to 0.15 NTU in at least 95% of the measurements. Turbidity shall be measured as described in 12VAC5-590-370 B 7 b and 12VAC5-590-370 E.

(b) Individual filter performance. Waterworks using conventional filtration treatment or direct filtration treatment receive 0.5-log Cryptosporidium treatment credit, which can be in addition to the 0.5-log credit under subdivision B 3 d (5) (a) of this section, during any month the waterworks meets the criteria in this paragraph. Compliance with these criteria shall be based on individual filter turbidity monitoring as described in 12VAC5-590-370 B 7 b (1).

(i) The filtered water turbidity for each individual filter shall be less than or equal to 0.15 NTU in at least 95% of the measurements recorded each month.

(ii) No individual filter may have a measured turbidity greater than 0.3 NTU in two consecutive measurements taken 15 minutes apart.

(iii) Any waterworks that has received treatment credit for individual filter performance and fails to meet the requirements of subdivision B 3 d (5) (b) (i) or (ii) of this section during any month does not receive a treatment technique violation under subdivision B 3 c (2) (c) if the commissioner determines the following:

((a)) The failure was due to unusual and short-term circumstances that could not reasonably be prevented through optimizing treatment plant design, operation, and maintenance.

((b)) The waterworks has experienced no more than two such failures in any calendar year.

(6) Additional filtration toolbox components.

(a) Bag and cartridge filters. Waterworks receive Cryptosporidium treatment credit of up to 2.0-log for individual bag or cartridge filters and up to 2.5-log for bag or cartridge filters operated in series by meeting the criteria in subdivision B 3 d (6) (a) (i) through (x) of this section. To be eligible for this credit, owners shall report the results of challenge testing that meets the requirements of subdivision B 3 d (6) (a)(ii) through (ix) of this section to the commissioner. The filters shall treat the entire plant flow taken from a surface water or groundwater under the direct influence of surface water source.

(i) The Cryptosporidium treatment credit awarded to bag or cartridge filters shall be based on the removal efficiency demonstrated during challenge testing that is conducted according to the criteria in subdivision B 3 d (6) (a) (ii) through (ix) of this section. A factor of safety equal to 1-log for individual bag or cartridge filters and 0.5-log for bag or cartridge filters in series shall be applied to challenge testing results to determine removal credit. Owners may use results from challenge testing conducted prior to January 5, 2006, if the prior testing was consistent with the criteria specified in subdivision B 3 d (6) (a) (ii) through (ix) of this section.

(ii) Challenge testing shall be performed on full-scale bag or cartridge filters, and the associated filter housing or pressure vessel, that are identical in material and construction to the filters and housings the waterworks will use for removal of Cryptosporidium. Bag or cartridge filters shall be challenge tested in the same configuration that the waterworks will use, either as individual filters or as a series configuration of filters.

(iii) Challenge testing shall be conducted using Cryptosporidium or a surrogate that is removed no more efficiently than Cryptosporidium. The microorganism or surrogate used during challenge testing is referred to as the challenge particulate. The concentration of the challenge particulate shall be determined using a method capable of discreetly quantifying the specific microorganism or surrogate used in the test; gross measurements such as turbidity shall not be used.

(iv) The maximum feed water concentration that can be used during a challenge test shall be based on the detection limit of the challenge particulate in the filtrate (i.e., filtrate detection limit) and shall be calculated using the following equation:

Maximum Feed Concentration = 1 x 10^4 x (Filtrate Detection Limit)

(v) Challenge testing shall be conducted at the maximum design flow rate for the filter as specified by the manufacturer.

(vi) Each filter evaluated shall be tested for a duration sufficient to reach 100% of the terminal pressure drop, which establishes the maximum pressure drop under which the filter may be used to comply with the requirements of subdivision B 3 d (6) (a) of this section.

(vii) Removal efficiency of a filter shall be determined from the results of the challenge test and expressed in terms of log removal values using the following equation:

$LRV = LOG_{10}(C_f) - LOG_{10}(C_p)$

where LRV = log removal value demonstrated during challenge testing; C_f = the feed concentration measured during the challenge test; and C_p = the filtrate concentration measured during the challenge test. In applying this equation, the same units shall be used for the feed and filtrate concentrations. If the challenge particulate is not detected in the filtrate, then the term C_p shall be set equal to the detection limit.

(viii) Each filter tested shall be challenged with the challenge particulate during three periods over the filtration cycle: within two hours of start-up of a new filter; when the pressure drop is between 45 and 55% of the terminal pressure drop; and at the end of the cycle after the pressure drop has reached 100% of the terminal pressure drop. An LRV shall be calculated for each of these challenge periods for each filter tested. The LRV for the filter (LRVfilter) shall be assigned the value of the minimum LRV observed during the three challenge periods for that filter.

(ix) If fewer than 20 filters are tested, the overall removal efficiency for the filter product line shall be set equal to the lowest LRV filter among the filters tested. If 20 or more filters are tested, the overall removal efficiency for the filter product line shall be set equal to the 10th percentile of the set of LRVfilter values for the various filters tested. The percentile is defined by (i/(n+1)) where i is the rank of n individual data points ordered lowest to highest. If necessary, the 10th percentile may be calculated using linear interpolation.

(x) If a previously tested filter is modified in a manner that could change the removal efficiency of the filter product line, challenge testing to demonstrate the removal efficiency of the modified filter shall be conducted and submitted to the commissioner.

(b) Membrane filtration.

(i) Waterworks receive Cryptosporidium treatment credit for membrane filtration that meets the criteria of this paragraph. Membrane cartridge filters that meet the definition of membrane filtration in 12VAC5-590-10 are eligible for this credit. The level of treatment credit a waterworks receives is equal to the lower of the values determined as follows:

((a)) The removal efficiency demonstrated during challenge testing conducted under the conditions in subdivision B 3 d (6) (b) (ii) of this section.

((b)) The maximum removal efficiency that can be verified through direct integrity testing used with the membrane filtration process under the conditions in subdivision B 3 d (6) (b) (iii) of this section.

(ii) Challenge Testing. The membrane used by the waterworks shall undergo challenge testing to evaluate removal efficiency, and the owner shall report the results of challenge testing to the commissioner. Challenge testing shall be conducted according to the criteria in paragraphs ((a)) through ((g)) of this section as follows (owners may use data from challenge testing conducted prior to January 5, 2006, if the prior testing was consistent with the criteria):

((a)) Challenge testing shall be conducted on either a full-scale membrane module, identical in material and construction to the membrane modules used in the waterworks' treatment facility, or a smaller-scale membrane module, identical in material and similar in construction to the full-scale module. A module is defined as the smallest component of a membrane unit in which a specific membrane surface area is housed in a device with a filtrate outlet structure.

((b)) Challenge testing shall be conducted using Cryptosporidium oocysts or a surrogate that is removed no more efficiently than Cryptosporidium oocysts. The organism or surrogate used during challenge testing is referred to as the challenge particulate. The concentration of the challenge particulate, in both the feed and filtrate water, shall be determined using a method capable of discretely quantifying the specific challenge particulate used in the test; gross measurements such as turbidity shall not be used.

((c)) The maximum feed water concentration that can be used during a challenge test is based on the detection limit of the challenge particulate in the filtrate and shall be determined according to the following equation:

Maximum Feed Concentration = $3.16 \times 10^6 \times$ (Filtrate Detection Limit)

((d)) Challenge testing shall be conducted under representative hydraulic conditions at the maximum design flux and maximum design process recovery specified by the manufacturer for the membrane module. Flux is defined as the throughput of a pressure driven membrane process expressed as flow per unit of membrane area. Recovery is defined as the volumetric percent of feed water that is converted to filtrate over the course of an operating cycle uninterrupted by events such as chemical cleaning or a solids removal process (i.e., backwashing).

((e)) Removal efficiency of a membrane module shall be calculated from the challenge test results and expressed as a log removal value according to the following equation:

$LRV = LOG_{10}(C_f) - LOG_{10}(C_p)$

where LRV = log removal value demonstrated during the challenge test; C_f = the feed concentration measured during the challenge test; and C_p = the filtrate concentration measured during the challenge test. Equivalent units shall be used for the feed and filtrate concentrations. If the challenge particulate is not detected in the filtrate, the term C_p is set equal to the detection limit for the purpose of calculating the LRV. An LRV shall be calculated for each membrane module evaluated during the challenge test.

((f)) The removal efficiency of a membrane filtration process demonstrated during challenge testing shall be expressed as a log removal value ($LRV_{C\text{-}Test}$). If fewer than 20 modules are tested, then $LRV_{C\text{-}Test}$ is equal to the lowest of the representative LRVs among the modules tested. If 20 or more modules are tested, then $LRV_{C\text{-}Test}$ is equal to the 10th percentile of the representative LRVs among the modules tested. The percentile is defined by (i/(n+1)) where i is the rank of n individual data points ordered lowest to highest. If necessary, the 10th percentile may be calculated using linear interpolation.

((g)) The challenge test shall establish a quality control release value (QCRV) for a nondestructive performance test that demonstrates the Cryptosporidium removal capability of the membrane filtration module. This performance test shall be applied to each production membrane module used by the waterworks that was not directly challenge tested in order to verify Cryptosporidium removal capability. Production modules that do not meet the established QCRV are not eligible for the treatment credit demonstrated during the challenge test.

((h)) If a previously tested membrane is modified in a manner that could change the removal efficiency of the membrane or the applicability of the non-destructive performance test and associated QCRV, additional challenge testing to demonstrate the removal efficiency of, and determine a new QCRV for, the modified

membrane shall be conducted and submitted to the commissioner.

(iii) Direct integrity testing. Owners shall conduct direct integrity testing in a manner that demonstrates a removal efficiency equal to or greater than the removal credit awarded to the membrane filtration process and meets the requirements described in subdivision B 3 d 6 (b) (iii) ((a)) through ((f)) of this section. A direct integrity test is defined as a physical test applied to a membrane unit in order to identify and isolate integrity breaches (i.e., one or more leaks that could result in contamination of the filtrate).

((a)) The direct integrity test shall be independently applied to each membrane unit in service. A membrane unit is defined as a group of membrane modules that share common valving that allows the unit to be isolated from the rest of the system for the purpose of integrity testing or other maintenance.

((b)) The direct integrity method shall have a resolution of three micrometers or less, where resolution is defined as the size of the smallest integrity breach that contributes to a response from the direct integrity test.

((c)) The direct integrity test shall have a sensitivity sufficient to verify the log treatment credit awarded to the membrane filtration process by the commissioner, where sensitivity is defined as the maximum log removal value that can be reliably verified by a direct integrity test. Sensitivity shall be determined using the approach in either of the following as applicable to the type of direct integrity test the waterworks uses:

((i)) For direct integrity tests that use an applied pressure or vacuum, the direct integrity test sensitivity shall be calculated according to the following equation:

$LRV_{DIT} = LOG_{10}(Q_p /(VCF \times Q_{breach}))$

where LRV_{DIT} = the sensitivity of the direct integrity test;

Q_p = total design filtrate flow from the membrane unit;

Q_{breach} = flow of water from an integrity breach associated with the smallest integrity test response that can be reliably measured, and

VCF = volumetric concentration factor. The volumetric concentration factor is the ratio of the suspended solids concentration on the high pressure side of the membrane relative to that in the feed water.

((ii)) For direct integrity tests that use a particulate or molecular marker, the direct integrity test sensitivity shall be calculated according to the following equation:

$LRV_{DIT} = LOG_{10}(C_f) - LOG_{10}(C_p)$

where LRV_{DIT} = the sensitivity of the direct integrity test;

C_f = the typical feed concentration of the marker used in the test; and

C_p = the filtrate concentration of the marker from an integral membrane unit.

((d)) Owners shall establish a control limit within the sensitivity limits of the direct integrity test that is indicative of an integral membrane unit capable of meeting the removal credit awarded by the commissioner.

((e)) If the result of a direct integrity test exceeds the control limit established under subdivision B 3 d (6) (b) (iii) ((d)) of this section, the owners shall remove the membrane unit from service. Owners shall conduct a direct integrity test to verify any repairs, and may return the membrane unit to service only if the direct integrity test is within the established control limit.

((f)) Owners shall conduct direct integrity testing on each membrane unit at a frequency of not less than once each day that the membrane unit is in operation. The commissioner may approve less frequent testing, based on demonstrated process reliability, the use of multiple barriers effective for Cryptosporidium, or reliable process safeguards.

(iv) Indirect integrity monitoring. Owners shall conduct continuous indirect integrity monitoring on each membrane unit according to the criteria in ((a)) through ((e)). Indirect integrity monitoring is defined as monitoring some aspect of filtrate water quality that is indicative of the removal of particulate matter. A waterworks that implements continuous direct integrity testing of membrane units in accordance with the criteria in B 3 d (6) (b) (iv) (iii) ((a)) through ((f)) of this section is not subject to the requirements for continuous indirect integrity monitoring. Owners shall submit a monthly report to the commissioner summarizing all continuous indirect integrity monitoring results triggering direct integrity testing and the corrective action that was taken in each case.

((a)) Unless the commissioner approves an alternative parameter, continuous indirect integrity monitoring shall include continuous filtrate turbidity monitoring.

((b)) Continuous monitoring shall be conducted at a frequency of no less than once every 15 minutes.

((c)) Continuous monitoring shall be separately conducted on each membrane unit.

((d)) If indirect integrity monitoring includes turbidity and if the filtrate turbidity readings are above 0.15 NTU for a period greater than 15 minutes (i.e., two consecutive 15-minute readings above 0.15 NTU), direct integrity testing shall immediately be performed on the associated

membrane unit as specified in subdivision B 3 d (6) (b) (iii) ((a)) through ((f)) of this section.

((e)) If indirect integrity monitoring includes a alternative parameter approved by the commissioner and if the alternative parameter exceeds a control limit approved by the commissioner for a period greater than 15 minutes, direct integrity testing shall immediately be performed on the associated membrane units as specified in subdivision B 3 d (6) (b) (iii) ((a)) through ((f)) of this section.

(c) Second stage filtration. Waterworks receive 0.5-log Cryptosporidium treatment credit for a separate second stage of filtration that consists of sand, dual media, GAC, or other fine grain media following granular media filtration if the commissioner approves. To be eligible for this credit, the first stage of filtration shall be preceded by a coagulation step and both filtration stages shall treat the entire plant flow taken from a surface water or groundwater under the direct influence of surface water source. A cap, such as GAC, on a single stage of filtration is not eligible for this credit. The commissioner shall approve the treatment credit based on an assessment of the design characteristics of the filtration process.

(d) Slow sand filtration (as secondary filter). Waterworks are eligible to receive 2.5-log Cryptosporidium treatment credit for a slow sand filtration process that follows a separate stage of filtration if both filtration stages treat entire plant flow taken from a surface water or ground water under the direct influence of surface water source and no disinfectant residual is present in the influent water to the slow sand filtration process. The commissioner shall approve the treatment credit based on an assessment of the design characteristics of the filtration process. This paragraph does not apply to treatment credit awarded to slow sand filtration used as a primary filtration process.

(7) Inactivation toolbox components.

(a) Calculation of CT values

(i) CT is the product of the disinfectant contact time (T, in minutes) and disinfectant concentration (C, in milligrams per liter). Owners of waterworks with treatment credit for chlorine dioxide or ozone under subdivision B 3 d (7) (b) of this section shall calculate CT at least once each day, with both C and T measured during peak hourly flow in accordance with the procedure listed in Appendix L.

(ii) Waterworks with several disinfection segments in sequence may calculate CT for each segment, where a disinfection segment is defined as a treatment unit process with a measurable disinfectant residual level and a liquid volume. Under this approach, owners shall add the Cryptosporidium CT values in each segment to determine the total CT for the treatment plant.

(b) CT values for chlorine dioxide and ozone.

(i) Waterworks receive the Cryptosporidium treatment credit listed in the following table by meeting the corresponding chlorine dioxide CT value for the applicable water temperature, as described in subdivision B 3 d (7) (a) of this section.

CT Values (mg-min/L) for Cryptosporidium Inactivation by Chlorine Dioxide[1]

Log credit	Water Temperature, °C										
	Less than or equal to 0.5	1	2	3	5	7	10	15	20	25	30
0.25	159	153	140	128	107	90	69	45	29	19	12
0.5	319	305	279	256	214	180	138	89	58	38	24
1.0	637	610	558	511	429	360	277	179	116	75	49
1.5	956	915	838	767	643	539	415	268	174	113	73
2.0	1275	1220	1117	1023	858	719	553	357	232	150	98
2.5	1594	1525	1396	1278	1072	899	691	447	289	188	122
3.0	1912	1830	1675	1534	1286	1079	830	536	347	226	147

[1]Waterworks may use this equation to determine log credit between the indicated values:

$$\text{Log credit} = (0.001506 \times (1.09116)^{\text{Temp}}) \times \text{CT}$$

(ii) Waterworks receive the Cryptosporidium treatment credit listed in the following table by meeting the corresponding ozone CT values for the applicable water temperature, as described in subdivision B 3 d (7) (a) of this section.

CT Values (mg-min/L) for Cryptosporidium Inactivation by Ozone[1]

Log credit	Water Temperature, °C										
	Less than or equal to 0.5	1	2	3	5	7	10	15	20	25	30
0.25	6.0	5.8	5.2	4.8	4.0	3.3	2.5	1.6	1.0	0.6	0.39
0.5	12	12	10	9.5	7.9	6.5	4.9	3.1	2.0	1.2	0.78
1.0	24	23	21	19	16	13	9.9	6.2	3.9	2.5	1.6
1.5	36	35	31	29	24	20	15	9.3	5.9	3.7	2.4
2.0	48	46	42	38	32	26	20	12	7.8	4.9	3.1
2.5	60	58	52	48	40	33	25	16	9.8	6.2	3.9
3.0	72	69	63	57	47	39	30	19	12	7.4	4.7

[1]Waterworks may use this equation to determine log credit between the indicated values:

$$\text{Log credit} = (0.0397 \times (1.09757)^{\text{Temp}}) \times \text{CT}$$

(c) Ultraviolet light. Waterworks receive Cryptosporidium, Giardia lamblia, and virus treatment credits for ultraviolet (UV) light reactors by achieving the corresponding UV dose values shown in subdivision B 3 d (7) (c) (i) of this section. Waterworks shall validate and monitor UV reactors as described in subdivision B 3 d (7) (c) (ii) and (iii) of this section to demonstrate that they are achieving a particular UV dose value for treatment credit.

(i) UV dose table. The treatment credits listed in this table are for UV light at a wavelength of 254 nm as produced by a low pressure mercury vapor lamp. To receive treatment credit for other lamp types, waterworks shall demonstrate an equivalent germicidal dose through reactor validation testing, as described in subdivision B 3 d (7) (c) (ii) of this section. The UV dose values in this table are applicable only to post-filter applications of UV in filtered systems.

UV dose table for Cryptosporidium, Giardia lamblia, and virus inactivation credit

Log credit	Cryptosporidium UV dose (mJ/cm2)	Giardia lamblia UV dose (mJ/cm2)	Virus UV dose (mJ/cm2)
0.5	1.6	1.5	39
1.0	2.5	2.1	58
1.5	3.9	3.0	79
2.0	5.8	5.2	100
2.5	8.5	7.7	121
3.0	12	11	143
3.5	15	15	163
4.0	22	22	186

(ii) Reactor validation testing. Waterworks shall use UV reactors that have undergone validation testing to determine the operating conditions under which the reactor delivers the UV dose required in subdivision B 3 d (7) (c) (i) of this section (i.e., validated operating conditions). These operating conditions shall include flow rate, UV intensity as measured by a UV sensor, and UV lamp status.

((a)) When determining validated operating conditions, owners shall account for the following factors: UV absorbance of the water; lamp fouling and aging; measurement uncertainty of online sensors; UV dose distributions arising from the velocity profiles through

the reactor; failure of UV lamps or other critical waterworks components; and inlet and outlet piping or channel configurations of the UV reactor.

((b)) Validation testing shall include the following: full scale testing of a reactor that conforms uniformly to the UV reactors used by the waterworks and inactivation of a test microorganism whose dose response characteristics have been quantified with a low pressure mercury vapor lamp.

(iii) Reactor monitoring.

((a)) Owners shall monitor their UV reactors to determine if the reactors are operating within validated conditions, as determined under subdivision B 3 d (7) (c) (ii) of this section. This monitoring shall include UV intensity as measured by a UV sensor, flow rate, lamp status, and other parameters the commissioner designates based on UV reactor operation. Owners shall verify the calibration of UV sensors and shall recalibrate sensors in accordance with a protocol the commissioner approves.

((b)) To receive treatment credit for UV light, waterworks shall treat at least 95% of the water delivered to the public during each month by UV reactors operating within validated conditions for the required UV dose, as described in subdivision B 3 d (7) (c) (i) and (ii) of this section. Owners shall demonstrate compliance with this condition by the monitoring required under subdivision B 3 d (7) (c) (iii)((a)) of this section.

e. Owners shall comply with the applicable recordkeeping and reporting requirements described in 12VAC5-590-530 and 12VAC5-590-550.

C. Reserved.

D. Reserved.

E. Reserved.

F. Reserved.

G. Beginning January 1, 1993, each owner shall certify annually in writing to the commissioner (using third party or manufacturer's certification) that, when polymers containing acrylamide or epichlorohydrin are used by the waterworks in drinking water systems, the combination (or product) of dose and monomer level does not exceed the following specified levels: Acrylamide = 0.05% dosed at 1 ppm (or equivalent) of polymer. Epichlorohydrin = 0.01% dosed at 20 ppm (or equivalent) of polymer. Certifications may rely on manufacturers or third parties, as approved by the commissioner.

H. Treatment technique for control of disinfection byproduct (DBPP) precursors.

1. Applicability.

a. Waterworks that use surface water or groundwater under the direct influence of surface water using conventional filtration treatment shall operate with enhanced coagulation or enhanced softening to achieve the TOC percent removal levels specified in subdivision H 2 of this section unless the waterworks meets at least one of the alternative compliance criteria listed in subdivision H 1 b or c of this section.

b. Alternative compliance criteria for enhanced coagulation and enhanced softening waterworks. Owners of waterworks that use surface water or groundwater under the direct influence of surface water provided with conventional filtration treatment may use the alternative compliance criteria in subdivisions H 1 b (1) through (6) of this section to comply with this section in lieu of complying with subdivision H 2 of this section. Owners shall still comply with monitoring requirements in 12VAC5-590-370 B 3 i.

(1) The waterworks' source water TOC level, measured according to 12VAC5-590-440, is less than 2.0 mg/L, calculated quarterly as a running annual average.

(2) The waterworks' treated water TOC level, measured according to 12VAC5-590-440, is less than 2.0 mg/L, calculated quarterly as a running annual average.

(3) The waterworks' source water TOC level, measured according to 12VAC5-590-440, is less than 4.0 mg/L, calculated quarterly as a running annual average; the source water alkalinity, measured according to 12VAC5-590-440, is greater than 60 mg/L (as $CaCO_3$), calculated quarterly as a running annual average; and either the TTHM and HAA5 running annual averages are no greater than 0.040 mg/L and 0.030 mg/L, respectively; or prior to the effective date for compliance in 12VAC590-370 B 3 a, the owner has made a clear and irrevocable financial commitment not later than the effective date for compliance in 12VAC590-370 B 3 a to use of technologies that will limit the levels of TTHMs and HAA5 to no more than 0.040 mg/L and 0.030 mg/L, respectively. Owners shall submit evidence of a clear and irrevocable financial commitment, in addition to a schedule containing milestones and periodic progress reports for installation and operation of appropriate technologies, to the commissioner for approval not later than the effective date for compliance in 12VAC590-370 B 3 a. These technologies shall be installed and operating not later than June 30, 2005. Failure to install and operate these technologies by the date in the approved schedule will constitute a violation of these regulations.

(4) The TTHM and HAA5 running annual averages are no greater than 0.040 mg/L and 0.030 mg/L, respectively, and the waterworks uses only chlorine for primary disinfection and maintenance of a residual in the distribution system.

(5) The waterworks' source water SUVA, prior to any treatment and measured monthly according to 12VAC5-590-440, is less than or equal to 2.0 L/mg-m, calculated quarterly as a running annual average.

(6) The waterworks' finished water SUVA, measured monthly according to 12VAC5-590-440, is less than or equal to 2.0 L/mg-m, calculated quarterly as a running annual average.

c. Additional alternative compliance criteria for softening waterworks. Waterworks practicing enhanced softening that cannot achieve the TOC removals required by subdivision H 2 b of this section may use the alternative compliance criteria in subdivisions H 1 c (1) and (2) of this section in lieu of complying with subdivision H 2 of this section. Owners shall still comply with monitoring requirements in 12VAC5-590-370 B 3 i.

(1) Softening that results in lowering the treated water alkalinity to less than 60 mg/L (as $CaCO_3$), measured monthly according to 12VAC5-590-440 and calculated quarterly as a running annual average.

(2) Softening that results in removing at least 10 mg/L of magnesium hardness (as $CaCO_3$), measured monthly according to 12VAC5-590-440 and calculated quarterly as a running annual average.

2. Enhanced coagulation and enhanced softening performance requirements.

a. Waterworks shall achieve the percent reduction of TOC specified in subdivision H 2 b of this section between the source water and the combined filter effluent, unless the commissioner approves a waterworks' request for alternate minimum TOC removal (Step 2) requirements under subdivision H 2 c of this section.

b. Required Step 1 TOC reductions, indicated in the following table, are based upon specified source water parameters measured in accordance with 12VAC5-590-440. Waterworks practicing softening are required to meet the Step 1 TOC reductions in the far-right column (Source water alkalinity greater than 120 mg/L) for the specified source water TOC:

Step 1 Required Removal of TOC by Enhanced Coagulation and Enhanced Softening for Community or Nontransient Noncommunity Waterworks That Use Surface Water or Groundwater Under the Direct Influence of Surface Water Using Conventional Treatment [1, 2]

Source-water TOC mg/L	Source-water alkalinity, mg/L as $CaCO_3$		
	0-60	greater than 60-120	greater than 120[3]
greater than 2.0 - 4.0	35.0%	25.0%	15.0%
greater than 4.0 - 8.0	45.0%	35.0%	25.0%
greater than 8.0	50.0%	40.0%	30.0%

[1]Waterworks meeting at least one of the conditions in subdivisions H 1 b (1) through (6) of this section are not required to operate with enhanced coagulation.

[2]Softening waterworks meeting one of the alternative compliance criteria in subdivision H 1 c of this section are not required to operate with enhanced softening.

[3]Waterworks practicing softening shall meet the TOC removal requirements in this column.

c. Waterworks that use surface water or groundwater under the direct influence of surface water with conventional treatment systems that cannot achieve the Step 1 TOC removals required by subdivision H 2 b of this section due to water quality parameters or operational constraints shall apply to the commissioner, within three months of failure to achieve the TOC removals required by subdivision H 2 b of this section, for approval of alternative minimum TOC (Step 2) removal requirements submitted by the waterworks. If the commissioner approves the alternative minimum TOC removal (Step 2) requirements, the commissioner may make those requirements retroactive for the purposes of determining compliance. Until the commissioner approves the alternate minimum TOC removal (Step 2) requirements, the owner shall meet the Step 1 TOC removals contained in subdivision H 2 b of this section.

d. Alternate minimum TOC removal (Step 2) requirements. Applications, made to the commissioner by waterworks using enhanced coagulation, for approval of alternative minimum TOC removal (Step 2) requirements under subdivision H 2 c of this section shall include, at a minimum, results of bench- or pilot-scale testing conducted under subdivision H 2 d (1) of this section. The submitted bench- or pilot-scale testing shall be used to determine the alternate enhanced coagulation level.

(1) Alternate enhanced coagulation level is defined as coagulation at a coagulant dose and pH as determined by the method described in subdivisions H 2 d (1) through (5) of this section such that an incremental addition of 10 mg/L of alum (or equivalent amount of ferric salt) results in a TOC removal of equal to or less than 0.3 mg/L. The

percent removal of TOC at this point on the "TOC removal versus coagulant dose" curve is then defined as the minimum TOC removal required for the waterworks. Once approved by the commissioner, this minimum requirement supersedes the minimum TOC removal required by the table in subdivision H 2 b of this section. This requirement will be effective until such time as the commissioner approves a new value based on the results of a new bench- and pilot-scale test. Failure to achieve the alternative minimum TOC removal levels set by the commissioner is a violation of these regulations.

(2) Bench- or pilot-scale testing of enhanced coagulation shall be conducted by using representative water samples and adding 10 mg/L increments of alum (or equivalent amounts of ferric salt) until the pH is reduced to a level less than or equal to the enhanced coagulation Step 2 target pH shown in the following table:

Enhanced Coagulation Step 2 Target pH

Alkalinity (mg/L as $CaCO_3$)	Target pH
0-60	5.5
greater than 60-120	6.3
greater than 120-240	7.0
greater than 240	7.5

(3) For waters with alkalinities of less than 60 mg/L for which addition of small amounts of alum or equivalent addition of iron coagulant drives the pH below 5.5 before significant TOC removal occurs, the owner shall add necessary chemicals to maintain the pH between 5.3 and 5.7 in samples until the TOC removal of 0.3 mg/L per 10 mg/L alum added (or equivalent addition of iron coagulant) is reached.

(4) The owner may operate at any coagulant dose or pH necessary (consistent with other sections of these regulations) to achieve the minimum TOC percent removal approved under subdivision H 2 c of this section.

(5) If the TOC removal is consistently less than 0.3 mg/L of TOC per 10 mg/L of incremental alum dose at all dosages of alum (or equivalent addition of iron coagulant), the water is deemed to contain TOC not amenable to enhanced coagulation. The waterworks may then apply to the commissioner for a waiver of enhanced coagulation requirements.

3. Compliance calculations.

a. Owners of waterworks that use surface water or groundwater under the direct influence of surface water other than those identified in subdivision H 1 b or H 1 c of this section shall comply with requirements contained in subdivision H 2 b or H 2 c of this section. Owners shall calculate compliance quarterly, beginning after the waterworks has collected 12 months of data, by determining an annual average using the following method:

(1) Determine actual monthly TOC percent removal, equal to:

(1-(treated water TOC/source water TOC))X100

(2) Determine the required monthly TOC percent removal (from either the table in subdivision H 2 b of this section or from subdivision H 2 c of this section).

(3) Divide the value in subdivision H 3 a (1) of this section by the value in subdivision H 3 a (2) of this section.

(4) Add together the results of subdivision H 3 a (3) of this section for the last 12 months and divide by 12.

(5) If the value calculated in subdivision H 3 a (4) of this section is less than 1.00, the waterworks is not in compliance with the TOC percent removal requirements.

b. Owners may use the provisions in subdivisions H 3 b (1) through (5) of this section in lieu of the calculations in subdivisions H 3 a (1) through (5) of this section to determine compliance with TOC percent removal requirements.

(1) In any month that the waterworks' treated or source water TOC level, measured according to 12VAC5-590-440, is less than 2.0 mg/L, the owner may assign a monthly value of 1.0 (in lieu of the value calculated in subdivision H 3 a (3) of this section) when calculating compliance under the provisions of subdivision H 3 a of this section.

(2) In any month that a waterworks practicing softening removes at least 10 mg/L of magnesium hardness (as $CaCO_3$), the waterworks may assign a monthly value of 1.0 (in lieu of the value calculated in subdivision H 3 a (3) of this section) when calculating compliance under the provisions of subdivision H 3 a of this section.

(3) In any month that the waterworks' source water SUVA, prior to any treatment and measured according to 12VAC5-590-440, is equal to or less than 2.0 L/mg-m, the owner may assign a monthly value of 1.0 (in lieu of the value calculated in subdivision H 3 a (3) of this section) when calculating compliance under the provisions of subdivision H 3 a of this section.

(4) In any month that the waterworks' finished water SUVA, measured according to 12VAC5-590-440, is equal to or less than 2.0 L/mg-m, the owner may assign a monthly value of 1.0 (in lieu of the value calculated in subdivision H 3 a (3) of this section) when calculating

compliance under the provisions of subdivision H 3 a of this section.

(5) In any month that a waterworks practicing enhanced softening lowers alkalinity below 60 mg/L (as $CaCO_3$), the owner may assign a monthly value of 1.0 (in lieu of the value calculated in subdivision H 3 a (3) of this section) when calculating compliance under the provisions of subdivision H 3 a of this section.

c. Waterworks that use surface water or groundwater under the direct influence of surface water and using conventional treatment may also comply with the requirements of this section by meeting the criteria in subdivision H 1 b or c of this section.

4. Enhanced coagulation or enhanced softening is the treatment technique required to control the level of DBP precursors in drinking water treatment and distribution systems for waterworks using surface water or groundwater under the direct influence of surface water and using conventional treatment.

I. The best technology, treatment techniques, or other means available for achieving compliance with the maximum contaminant levels for disinfection byproducts show in Table 2.13 are listed below:

1. The best technology, treatment techniques, or other means available for achieving compliance with the maximum contaminant levels for bromate and chlorite:

Disinfection byproduct	Best available technology
Bromate	Control of ozone treatment process to reduce production of bromate.
Chlorite	Control of treatment processes to reduce disinfectant demand and control of disinfection treatment processes to reduce disinfectant levels

2. The best technology, treatment techniques, or other means available for achieving compliance with the running annual average maximum contaminant levels for TTHM and HAA5:

Disinfection byproduct	Best available technology
Total trihalomethanes (TTHM) and Haloacetic acids (five) (HAA5)	Enhanced coagulation or enhanced softening or GAC10, with chlorine as the primary and residual disinfectant

3. The best technology, treatment techniques, or other means available for achieving compliance with the locational running annual average maximum contaminant levels for TTHM and HAA5 for all systems that disinfect their source water:

Disinfection byproduct	Best available technology
Total trihalomethanes (TTHM) and Haloacetic acids (five) (HAA5)	Enhanced coagulation or enhanced softening, plus GAC10; or nanofiltration with a molecular weight cutoff less than or equal to 1000 Daltons; or GAC20

4. The best technology, treatment techniques, or other means available for achieving compliance with the locational running annual average maximum contaminant levels for TTHM and HAA5 for consecutive ~~systems~~ waterworks and applies only to the disinfected water that consecutive ~~systems~~ waterworks buy or otherwise receive:

Disinfection byproduct	Best available technology
Total trihalomethanes (TTHM) and Haloacetic acids (five) (HAA5)	~~Systems~~ Waterworks serving equal to or greater than 10,000: Improved distribution system and storage tank management to reduce residence time, plus the use of chloramines for disinfectant residual maintenance ~~Systems~~ Waterworks serving less than 10,000: Improved distribution system and storage tank management to reduce residence time

J. The best technology, treatment techniques, or other means available for achieving compliance with the maximum residual disinfectant levels identified in Table 2.12 is the control of treatment processes to reduce disinfectant demand and control of disinfection treatment processes to reduce disinfectant levels.

K. If spent filter backwash water, thickener supernatant, or liquids from dewatering processes are recycled, in any waterworks supplied by a surface water source and waterworks supplied by a groundwater source under the direct influence of surface water that employ conventional filtration or direct filtration treatment, then they are subject to the recycle treatment technique requirement. Under this requirement recycle flows shall be returned through all the processes of the treatment system, or an alternative location approved by the state, by June 8, 2004.

L. Waterworks with uncovered finished water storage facilities shall comply with the requirements to cover the facility or treat the discharge from the facility as described in this paragraph.

1. Waterworks using uncovered finished water storage facilities shall comply with the conditions of this section.

2. Owners shall notify the commissioner of the use of each uncovered finished water storage facility no later than April 1, 2008.

3. Owners shall meet the conditions of subdivision L 3 a or b of this section for each uncovered finished water storage facility or be in compliance with a State-approved schedule to meet these conditions no later than April 1, 2009.

a. All uncovered finished water storage facilities shall be covered.

b. Waterworks shall treat the discharge from the uncovered finished water storage facility to the distribution system to achieve inactivation and/or removal of at least 4-log virus, 3-log Giardia lamblia, and 2-log Cryptosporidium using a protocol approved by the commissioner.

4. Failure to comply with the requirements of this section is a violation of the treatment technique requirement.

12VAC5-590-421. Groundwater system treatment techniques.

A. Owners of groundwater systems that (i) have confirmed E. coli contamination as described in 12VAC5-590-379 B or (ii) have been notified in writing of a significant deficiency as described in 12VAC5-590-350 D shall meet the requirements of this section. Failure to meet any requirement of this section after the applicable time period specified is a treatment technique violation.

1. Owners of groundwater systems meeting either one of the conditions in clause (i) or (ii) above shall implement one or more of the following corrective actions:

a. Correct all significant deficiencies;

b. Provide an alternate source of water;

c. Eliminate the source of contamination; or

d. Provide treatment of the groundwater source that reliably achieves at least 4-log treatment of viruses before or at the first consumer.

2. Unless the ODW directs the groundwater system owner to implement a specific corrective action, the groundwater system owner shall consult with the ODW regarding the appropriate corrective action within 30 days of receiving written notification from the commissioner or the laboratory. This consultation may take the form of a telephone conversation, electronic mail, meeting, or other mechanism agreed to by the ODW.

3. Within 45 days of receiving this notification, the groundwater system owner shall submit a written Corrective Action Plan (CAP) to the commissioner that satisfactorily addresses the deficiency. The CAP shall include a schedule for completing individual actions, and shall include one or more of the corrective actions in subdivision A 1 of this section. Approval of the CAP by the commissioner constitutes an approved CAP.

4. Within 120 days of receiving written notification from the commissioner or the laboratory, the groundwater system owner shall either:

a. Have a completed corrective action in accordance with the commissioner-approved CAP including commissioner-specified interim measures; or

b. Be in compliance with a commissioner-approved CAP and schedule subject to the conditions specified in subdivisions 4 b 1 and 2 of this subsection.

(1) Any subsequent modifications to a commissioner-approved CAP and schedule shall also be approved by the commissioner.

(2) If the commissioner specifies interim measures for protection of the public health pending the commissioner's approval of the CAP and schedule or pending completion of the CAP, the groundwater system owner shall comply with these interim measures as well as with any schedule specified by the commissioner.

5. When a significant deficiency is identified at a waterworks that uses both groundwater and surface water or a GUDI source, the owner shall comply with this section unless the commissioner has determined that the significant deficiency is in a portion of the distribution system that is served solely by surface water or a GUDI.

B. Owners of groundwater systems that provide at least 4-log treatment of viruses before or at the first customer shall conduct compliance monitoring to demonstrate treatment effectiveness.

1. Existing groundwater sources. A groundwater system that is not required to meet the source water monitoring requirements of 12VAC5-590-379 for any groundwater source(s) because the owner has been notified by the ODW that the groundwater system provides at least 4-log treatment of viruses before or at the first customer for any groundwater source(s) shall comply with the following:

a. The groundwater system owner shall have written approval from the ODW that the groundwater system provides at least 4-log treatment of viruses before or at the first customer served by the groundwater source.

b. The groundwater system owner shall conduct compliance monitoring as required by subsection C of this section within 30 days of placing the source in service.

2. New groundwater sources. A groundwater system owner that places a new groundwater source into service shall

meet the requirements of subdivisions 1 a and b of this subsection and conduct raw water monitoring in accordance with 12VAC5-590-425. The groundwater system owner shall provide engineering, operational, or other information as required by the ODW.

C. The owner of a groundwater system subject to the requirements of subsection B of this section shall monitor the effectiveness and reliability of treatment for that groundwater source before or at the first customer as follows:

1. Chemical disinfection.

a. The owner of a groundwater system that serves greater than 3,300 people shall continuously monitor and record the residual disinfectant concentration using analytical methods specified in 40 CFR 141.74 (a)(2) at a location approved by the ODW and shall record the lowest residual disinfectant concentration each day that water from the groundwater source is served to the public. The groundwater system owner shall maintain the ODW-determined residual disinfectant concentration every day the groundwater system serves water from the groundwater source to the public. If there is a failure in the continuous monitoring equipment, the groundwater system owner shall conduct grab sampling every four hours until the continuous monitoring equipment is returned to service. The system shall resume continuous residual disinfectant monitoring within 14 days.

b. The owner of a groundwater system that serves 3,300 or fewer people shall monitor the residual disinfectant concentration using analytical methods specified in 40 CFR 141.74 (a)(2) at a location approved by the ODW and record the residual disinfection concentration each day that water from the groundwater source is served to the public. The groundwater system owner shall maintain the ODW-determined residual disinfectant concentration every day the groundwater system serves water from the groundwater source to the public. The groundwater system owner shall take a daily grab sample during the hour of peak flow or at another time specified by the ODW. If any daily grab sample measurement falls below the ODW-determined residual disinfectant concentration, the groundwater system owner shall take follow-up samples every four hours until the residual disinfectant concentration is restored to the ODW-determined level. A groundwater system that serves 3,300 or fewer people may monitor continuously to meet the requirements of this subsection.

c. Failure to maintain the ODW-specified minimum residual disinfectant concentration for a period of more than four hours is a violation of the treatment technique requirement.

2. A groundwater system owner that uses an ODW-approved alternative treatment to meet the requirements of this section by providing at least 4-log treatment of viruses before or at the first customer shall:

a. Monitor the alternative treatment in accordance with all ODW-specified monitoring requirements; and

b. Operate the alternative treatment in accordance with all ODW-specified compliance requirements necessary to achieve at least 4-log treatment of viruses.

3. Failure to meet the monitoring requirements of subsection C of this section is a violation and requires the groundwater system owner to provide public notification as required in 12VAC5-590-540.

D. Discontinuing compliance monitoring or treatment.

1. A groundwater system owner may discontinue compliance monitoring if the ODW determines and documents in writing that compliance monitoring is no longer necessary for that groundwater source. Owners of groundwater systems that have ODW approval to discontinue compliance monitoring shall be subject to the triggered source water monitoring requirements of 12VAC5-590-379.

2. A groundwater system owner discontinuing compliance monitoring is still subject to the requirements of 12VAC5-590-380 H.

3. Owners of waterworks with groundwater sources that have been required by the commissioner to provide at least 4-log treatment of viruses shall not discontinue treatment or monitoring.

12VAC5-590-425. Raw water monitoring requirements for groundwater sources.

A. The owner of any groundwater source utilizing chlorine disinfection or any other treatment or chemical addition that may alter or affect the bacteriological quality of the raw water shall collect source samples for bacteriological analysis in accordance with this section.

B. All bacteriological samples under this section shall be collected from the raw water prior to any treatment or chemical addition.

1. The owner shall provide a suitable raw water sample tap at each groundwater source.

2. If conditions are such that it is not possible to install a raw water sample tap, an alternate sample location acceptable to the commissioner may be utilized for this monitoring.

C. All samples shall be analyzed in accordance with 12VAC5-590-440 by the DCLS or by a laboratory certified by DCLS for drinking water samples and by a test method that will yield a Most Probable Number (MPN) result for both total coliforms and E. coli.

D. Number of samples.

1. The number of routine raw water samples to be collected and the frequency of sampling shall be determined by the district engineer. The district engineer will notify the waterworks owner of the raw water sampling requirements.

2. As a minimum, the owner shall collect raw water samples in accordance with the following table:

Source Type	Minimum Routine Raw Water Monitoring Frequency	Parameters
Well located in non-karst geology	One sample per year	Total coliforms MPN and E coli MPN
Well located in karst geology	One sample per calendar quarter	Total coliforms MPN and E coli MPN
Spring	One sample per month	Total coliforms MPN and E coli MPN

3. When a single sample result from any groundwater source that requires a routine raw water monitoring frequency of less than monthly indicates total coliforms in excess of 50 colonies per 100 mL or the presence of E. coli, the owner shall collect one confirmation sample within 10 calendar days of notification of the results. The district engineer may require that additional samples be collected and will establish the specific number of samples and the monitoring frequency.

E. If the results of the raw water monitoring required by this section indicate total coliforms in excess of 50 colonies per 100 ml in two or more samples collected during any running six-month period or the presence of E. coli in two or more samples collected during any running six-month period, the waterworks owner shall provide all necessary information required in 12VAC5-590-430 to the district engineer and the commissioner will make a GUDI determination for the groundwater source.

F. If the results of the raw water monitoring required by this section indicate the presence of E. coli in two or more samples collected during any running six-month period, the waterworks owner shall:

1. Issue a Tier 1 public notice in accordance with 12VAC5-590-540 A 1.

2. Provide disinfection treatment to achieve a 4-log virus inactivation as specified in 12VAC5-590-421 A 1 d.

3. Conduct compliance monitoring as specified in 12VAC5-590-421 C 1.

12VAC5-590-440. Analytical methods.

~~Analytical methods to determine compliance with the requirements of this chapter shall be those specified in the applicable edition of "Standard Methods for the Examination of Water and Wastewater," published by the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation; "Methods for Chemical Analysis of Water and Wastes," Environmental Protection Agency, Office of Technology Transfer, Washington, D.C. 20460, 1974; and "Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water" (Sept 1986), EPA, Environmental Monitoring and Support Laboratory, Cincinnati, OH 45268 or in the case of primary maximum contaminant levels and lead and copper action levels, those methods shall be followed by the Division of Consolidated Laboratory Services and~~ All drinking water analyses for compliance purposes shall have been performed by analytical methods that are consistent with current U.S. Environmental Protection Agency regulations found at 40 CFR Part 141 and 40 CFR Part 143. ~~All laboratories~~ Laboratories seeking certification to perform drinking water analyses shall comply with all ~~appropriate~~ applicable regulations promulgated by the Department of General Services, Division of Consolidated Laboratory Services.

Testing for alkalinity, calcium, conductivity, disinfectant residual, orthophosphate, pH, silica, temperature, and turbidity for compliance purposes may be performed by any person or party acceptable to the commissioner.

Table 2.2 — Inorganic Chemicals.

Substance	Primary Maximum Contaminant Level (mg/L)
Antimony	0.006
Arsenic (As)	0.010***
Asbestos	7 Million Fibers/Liter (longer than 10 um)
Barium (Ba)	2
Beryllium	0.004
Cadmium (Cd)	0.005
Chromium (Cr)	0.1
Cyanide (as free Cyanide)	0.2
Fluoride (F)	4.0 #

Mercury (Hg)	0.002
Nickel	~~0.1~~ No Limits Designated
Nitrate (as N)	10**
Nitrite (as N)	1
Total Nitrate and Nitrite (as N)	10
Selenium (Se)	0.05
Thallium	0.002
Substance	Secondary Maximum Contaminant Level (mg/L)
Chloride (Cl)	250.0
Copper (Cu)	1.0
Corrosivity	Noncorrosive, See Appendix B
Fluoride	2.0
Foaming Agents	0.5*
Iron (Fe)	0.3
Manganese (Mn)	0.05
Sodium (Na)	No Limits Designated
Sulfate (SO_4)	250.0
Zinc (Zn)	5.0
Substance	Action Level (mg/L)
Lead (Pb)	0.015
Copper (Cu)	1.3

Note. For artificially fluoridated waterworks the minimum concentration of fluoride should be 0.8 mg/L and the maximum should be 1.0 mg/L. The optimum control limit is 0.9 mg/L. (See Appendix B)

*Note. Concentration reported in terms of Methylene Blue Active Substances.

**Note. See Appendix B for Exception Regarding Noncommunity Waterworks.

***Note. The PMCL for arsenic is 0.010 mg/L for community and nontransient noncommunity waterworks effective January 23, 2006. Arsenic sampling results shall be reported to the nearest 0.001 mg/L.

Table 2.3 — Organic Chemicals.

Substance	Primary Maximum Contaminant Levels (mg/L)
VOC	
1. Vinyl Chloride	0.002
2. Benzene	0.005
3. Carbon Tetrachloride	0.005
4. 1,2-Dichloroethane	0.005
5. Trichloroethylene (TCE)	0.005
6. 1,1-Dichloroethylene	0.007
7. 1,1,1-Trichloroethane	0.2
8. para-Dichlorobenzene	0.075
9. cis-1,2-Dichloroethylene	0.07
10. 1,2-Dichloropropane	0.005
11. Ethylbenzene	0.7
12. Monochlorobenzene	0.1
13. o-Dichlorobenznen	0.6
14. Styrene	0.1
15. Tetrachloroethylene	0.005
16. Toluene	1
17. trans-1,2-Dichloroethylene	0.1
18. Xylene (total)	10
19. Dichloromethane	0.005
20. 1,2,4-Trichlorobenzene	0.07
21. 1,1,2-Trichloroethane	0.05
SOC	
1. Alachlor	0.002
2. Atrazine	0.003
3. Carbofuran	0.04
4. Chlordane	0.002
5. Heptachlor	0.0004
6. Heptachlor epoxide	0.0002
7. Polychlorinated biphenyls (PCBs)	0.0005

8. Dibromochloropropane (DBCP)	0.0002
9. Ethylene dibromide (EDB)	0.00005
10. Lindane	0.0002
11. Methoxychlor	0.04
12. Toxaphene	0.003
13.~~,~~4-Dichlorophenoxyacetic Acid (2,4-D)	0.07
14. 2,4,5-Trichlorophenoxypropionic Acid (2,4,5-TP or Silvex)	0.05
15. Reserved	
16. Reserved	
17. Reserved	
18. Pentachlorophenol	0.001
19. Benzo(a)pyrene	0.0002
20. Dalapon	0.2
21. Di(2-ethylhexy)adipate	0.4
22. Di(2-ethylhexy)phthalate	0.006
23. Dinoseb	0.007
24. Diquat	0.02
25. Endothall	0.1
26. Endrin	0.002
27. Glyphosate	0.7
28. Hexachlorobenzene	0.001
29. Hexachlorocyclopentadiene	0.05
30. Oxamyl (Vydate)	0.2
31. Picloram	0.5
32. Simazine	0.004
33. 2,3,7,8-TCDD (Dioxin)	3 X 10^{-8}

Table 2.4 — Physical Quality.

Parameter	Maximum Contaminant Level	Concentration
Color	Secondary	15 Color Units
Odor	Secondary	3 Threshold odor numbers
pH	Secondary	6.5-8.5
Total Dissolved	Secondary	500 mg/L Solids (TDS)
Turbidity	Primary	*1 Turbidity Unit

* See Appendix B for operational requirements.

Table 2.5 — Radiological Quality.

A. Maximum Contaminant Level Goals for Radionuclides	
~~SUBSTANCE~~ Substance	MCLG
1. Combined radium-226 and radium-228~~.~~	Zero
2. Gross alpha particle activity (excluding Radon and uranium)	Zero
3. Beta particle and photon radioactivity~~.~~	Zero
4. Uranium	Zero
B. Primary Maximum Contaminant Levels for Radionuclides	
~~SUBSTANCE~~ Substance	Primary Maximum Contaminant Level
1. Combined radium-226 and radium-228	5 pCi/L
2. Gross Alpha Activity (excluding Radon and Uranium)	15 pCi/L
3. Uranium	30 µg/L
Primary Maximum Contaminant Levels for Beta Particle and Photon Radioactivity from Man-Made Radionuclides	
1. The average annual concentration of Beta particle and Photon radioactivity from man-made radionuclides in drinking water shall not produce an annual dose equivalent to the total body or any internal organ greater than 4 millirem/year.	
2. Except for the radionuclides listed in Schedule I, the concentration of man-made radionuclides causing 4 MREM total body or organ dose equivalents shall be calculated on the basis of a 2 liter per day drinking	

water intake using the 168-hour data listed in "Maximum Permissible Body Burdens and Maximum Permissible Concentrations of Radionuclides in Air and Water for Occupational Exposure,'" MBS Handbook 69 as amended August 1963, U.S. Department of Commerce. If two or more radionuclides are present, the sum of their annual dose equivalent to the total body or to any organ exceed 4 millirem/year.

Schedule 1		
Average annual concentrations assumed to produce a total body organ dose of 4 mrem/year.		
Radionuclide	Critical Organ	pCi/liter
Tritium	Total Body	20,000
Strontium-90	Bone Marrow	8

* See Appendix B.

Table 2.6 — Unregulated Contaminant Organics to be Monitored.

Group A	
1. Chloroform	12. Chloromethane
2. Bromodichloromethane	13. Bromoethane
3. Chlorodibromomethane	14. 1,2,3-Trichloropropane
4. Bromoform	15. 1,1,1,2-Tetrachloroethane
5. Chlorobenzene	16. Chloroethane
6. m-Dichlorobenzene	17. 2,2-Dichloropropane
7. Dibromomethane	18. o-Chlorotoluene
8. 1,1-Dichloropropene	19. p-Chlorotoluene
9. 1,1-Dichloroethane	20. Bromobenzene
10. 1,1,2,2-Tetrachloroethane	21. 1,3-Dichloropropene
11. 1,3-Dichloropropane	
Group B	
1. Aldrin	8. Metoachlor
2. Butachlor	9. Metribuzin
3. Carbaryl	10. Propachlor
4. Dicamba	11. Aldicarb
5. Dieldrin	12. Aldicarb sulfone
6. Methomyl	13. Aldicarb sulfoxide
7. 3-Hyposycarbofuran	

Table 2.7 — Reserved

Table 2.8 — Organic Chemical Monitoring Implementation Schedule.

Number of Persons Served	Monitoring to Begin During the Quarter that Begins
Over 10,000	January 1,1988
3,300 to 10,000	January 1,1989
less than 3,300	January 1,1991

Table 2.9 — PMCL Effective Dates.

Table 2.3, Organics Chemicals, VOC 1 through 8 (Phase I)	January 9, 1989
Total Trihalomethanes and Fluoride	July 1, 1991
Table 2.3, Organics Chemicals, VOC 9 through 18 and SOC 1 through 14 (Phase II VOCs and SOCs)	July 30, 1992
Asbestos, Cadmium, Chromium, Mercury, Nitrate, Nitrite, Total Nitrate+Nitrite, Selenium (Phase II IOCs)	July 30, 1992
Table 2.3, Organics Chemicals, SOC 15 through 18 and Table 2.2, Inorganic Chemicals, Barium (Phase II SOCs and IOCs)	January 1, 1993
Table 2.3, Organics Chemicals, VOC 19 through 21, SOC 19 through 33 and Table 2.2, Inorganic Chemicals; antimony, beryllium, cyanide (as free cyanide), nickel, and thallium	January 17, 1994
Uranium	December 8, 2003

Table 2.10 — Maximum Contaminant Level Goals for Microbiological Contaminants.

Contaminant	MCLG
Giardia lamblia	Zero
Viruses	Zero
Legionella	Zero
Total coliforms (including fecal coliforms and Escherichia coli)	Zero
Cryptosporidium	Zero

Table 2.11 — Maximum Contaminant Level Goals for Disinfection Byproducts.

Disinfection byproduct	MCLG (mg/L)
Bromate	Zero
Bromodichloromethane	Zero
Bromoform	Zero
Chlorite	0.8
Chloroform	~~Zero~~ 0.07
Dibromochloromethane	0.06
Dichloroacetic acid	Zero
Monochloroacetic acid	0.07
Trichloroacetic acid	0.02

Table 2.12 — Maximum Residual Disinfectant Level Goals (MRDLG) and Maximum Residual Disinfectant Levels (MRDL) for Disinfectants

Disinfectant residual	MRDLG (mg/L)	MRDL (mg/L)
Chlorine	4 (as Cl_2)	4.0 (as Cl_2)
Chloramines	4 (as Cl_2)	4.0 (as Cl_2)
Chlorine dioxide	0.8 (as ClO_2)	0.8 (as ClO_2)

Notwithstanding the MRDLs in Table 2.12, owners may increase residual disinfectant levels in the distribution system of chlorine or chloramines (but not chlorine dioxide) to a level and for a time necessary to protect public health, to address specific microbiological contamination problems caused by circumstances such as, but not limited to, distribution line breaks, storm run-off events, source water contamination events, or cross-connection events.

Table 2.13 — Primary Maximum Contaminant Levels (PMCL) for Disinfection Byproducts

Disinfection byproduct	PMCL (mg/L)
Total trihalomethanes (TTHM)	0.080
Haloacetic Acids (five) (HAA5)	0.060
Bromate	0.010
Chlorite	1.0

12VAC5-590-460. Personnel.

The operation of waterworks, both small and large, must rest in the hands of qualified persons. The number of such employees in a waterworks system depends principally upon the size, the quality of the raw water, and the type of treatment processes used.

A. Waterworks operators designated by the waterworks owner to be in responsible charge must possess a valid waterworks operator license issued by the Board for Waterworks and Wastewater Works Operators and Onsite Sewage Professionals, Department of Professional and Occupational Regulation, in accordance with that board's regulations (18VAC160-20-10 et seq.) and Chapters 1, 2, 3, and 23 of Title 54.1 of the Code of Virginia. The license must be of a classification equal to or higher than that of the waterworks. Additional operating personnel at the waterworks must also be licensed as specified below.

B. The number and class of operators in attendance and additional operating personnel are a minimum to meet the requirements of protection of the public health of the consumer and safety of the operating personnel. The classification of operators and additional operating personnel in attendance must conform with Table 2.9.

1. The owner shall designate one or more properly licensed operators to be in responsible charge of the waterworks at all times. When no designated operator is on duty or in communication with the operating personnel in attendance at the waterworks, a substitute operator shall be designated by the owner. The substitute operator shall possess a valid operator license of a classification equal to or greater than that of the waterworks.

2. All waterworks having design capacity of 2.0 mgd or higher and employing filtration must have a minimum of two operating personnel on duty whenever the plant is in operation. All other waterworks employing filtration must have a minimum of one operating person on duty whenever the plant is in operation.

3. Waterworks designed for softening only and utilizing chemical precipitation:

a. Waterworks having a design capacity of 2.0 mgd or higher must have a minimum of two operating personnel in attendance at all times the plant is in operation; and

b. All other waterworks must have a minimum of one operator operating person in attendance at all times the treatment plant is in operation.

4. Waterworks utilizing iron and manganese removal by precipitation and having a design capacity of 0.5 mgd or higher must have a minimum of one operating person on duty at all times the treatment plant is in operation.

5. Waterworks providing treatment or no treatment and serving 400 or more persons and not previously covered will require daily attendance at each treatment facility by an operating person for sufficient time to insure proper operation of the facility and protection of the public health, as determined by the division.

TABLE 2.9
MINIMUM CLASSIFICATION FOR WATERWORKS OPERATIONS
ADDITIONAL OPERATING PERSONNEL

PLANT CLASSI-FICATION	PLANT CAPACITY (MGC)	EQUIVALENT POPULATION SERVED	TREATMENT	OPERATOR IN RESPONSIBLE CHARGE (CLASS)	SHIFT SUPERVISOR (CLASS)	OTHERS
CLASS I	15.0 or more	150,000	Conventional filtration or filter rate more than 2 gpm/ft^2	I	I	II,III,IV Trainee*
CLASS I	5.0 but less than 15.0	50,000 but less than 150,000	Conventional filtration filter rate more than 2 gpm/ft^2	I	II	II,III,IV Trainee*
CLASS II	Less than 5.0	Less than 50,000	Filtering rater greater than 2 gpm/ft^2	II	II	III, IV Trainee*
CLASS II	0.5 but less than 5.0	5,000 but less than 50,000	Conventional filtration	II	III	III, IV Trainee*
CLASS III	Less than 0.5	Less than 5,000	Conventional filtration	III	III	IV or Trainee*
CLASS III	5,000 or more		Approved treatment other than conventional filtration and fluoridation	III	IV	IV or Trainee*
CLASS III	Sufficient persons or connections to be classified as a Public Water supply		Not under higher classifications but using fluoridation	III	IV	Trainee*
CLASS IV	Less than 5,000		Approved treatment other than conventional filtration and fluoridation or no treatment serving 400 or more persons	IV	IV	Trainee*

* Trainees should meet basic prerequisites for operators with the exception of experience and have potential for licensing wherever listed in these guidelines. Owner must provide a qualified substitute operator when only one operator is normally employed. The substitute must have the same class license as the operator.

12VAC5-590-500. Disinfection by chlorination.

A. All water supplies derived from surface water sources in whole or in part shall be disinfected in accordance with 12VAC5-590-1000 until June 29, 1993. It is recommended that a chlorine residual be maintained. Beginning June 29, 1993, every owner of a waterworks shall comply with the disinfection requirements of 12VAC5-590-420.

B. Owners of waterworks utilizing surface waters as a water supply shall practice prechlorination. The requirement for prechlorination may be waived by the ~~division~~ commissioner when warranted.

C. Owners of waterworks utilizing groundwater as a water supply that has been determined by the ~~division~~ commissioner to be under the direct influence of surface water, as provided in 12VAC5-590-430, will be required to disinfect. If the commissioner determines that the groundwater supply is surface influenced, the owner shall provide disinfection during the interim before filtration is installed in accordance with 12VAC5-590-420 B 2 f. If filtration is installed prior to June 29, 1993, the owner shall comply with the disinfection requirements of 12VAC5-590-1000 until June 29, 1993. By June 29, 1993, all owners of waterworks using a groundwater source determined to be under the direct influence of surface water shall comply with the disinfection requirements of 12VAC5-590-420.

D. ~~The owner~~ Owners of ~~any waterworks utilizing~~ groundwater ~~as a water supply that is not governed by 12VAC5-590-500 will be required to disinfect in accordance with 12VAC5-590-1000 if a sanitary survey reveals a potential source of contamination or if the water fails to meet the bacteriological quality standards set forth in Article 1 (12VAC5-590-340 et seq.) of Part II of this chapter.~~ systems subject to the requirements of 12VAC5-590-421 A 1 d shall provide a disinfectant residual concentration (C) and contact time (T) to achieve a 4-log inactivation of viruses. CT shall be calculated in accordance with Appendix L, which contains information on calculation methods and contact tank baffling factors.

E. Disinfection profile data and disinfection benchmark data.

1. The owner of any waterworks that has disinfection profile data shall retain this data in graphic form, as a spreadsheet, or in some other format acceptable to the commissioner for review as part of sanitary surveys conducted by the commissioner. Appendix L lists the procedure for developing a disinfection profile.

2. Disinfection benchmarking.

a. The owner of any waterworks that has developed a disinfection profile and that decides to make a significant change to its disinfection practice shall consult with the commissioner prior to making such change. Significant changes to disinfection practice are:

(1) Changes to the point of disinfection;

(2) Changes to the disinfectants used in the treatment plant;

(3) Changes to the disinfection process; and

(4) Any other modification identified by the commissioner.

b. The owner of any waterworks that is modifying its disinfection practice shall calculate its disinfection benchmark using the following procedure:

(1) For each year of profiling data collected, the owner shall determine the lowest average monthly Giardia lamblia inactivation in each year of profiling data. The owner shall determine the average Giardia lamblia inactivation for each calendar month for each year of profiling data by dividing the sum of daily (or weekly) Giardia lamblia inactivation by the number of values calculated for that month.

(2) The disinfection benchmark is the lowest monthly average value (for waterworks with one year of profiling data) or average of lowest monthly average values (for waterworks with more than one year of profiling data) of the monthly logs of Giardia lamblia inactivation in each year of profiling data.

(3) The owner of a waterworks that uses either chloramines or ozone for primary disinfection shall also calculate the disinfection benchmark for viruses using a method approved by the commissioner.

c. The owner shall submit the following information to the commissioner as part of the waterworks' consultation process.

(1) A description of the proposed change;

(2) The disinfection profile for Giardia lamblia (and, if necessary, viruses) and benchmark listed in subdivision E 2 b of this section;

(3) An analysis of how the proposed change will affect the current levels of disinfection; and

(4) Any additional information to justify the change.

12VAC5-590-530. Reporting.

A. The results of any required monitoring activity shall be reported by the owner (or their authorized agent) to the ODW no later than (i) the 10th day of the month following the month during which the ~~tests~~ test results were ~~taken~~ received, or (ii) the 10th day following the end of the monitoring period, whichever is shorter, unless stipulated otherwise by the commissioner. The results of any required monitoring

activity shall be reported by the owner in a format prescribed by the commissioner.

~~1. Owners of waterworks required to sample quarterly shall report to the ODW within 10 days after the end of each quarter in which samples were collected.~~

~~2. Owners of waterworks required to sample less frequently than quarterly shall report to the district engineer within 10 days after the end of each monitoring period in which samples were collected.~~

B. It shall be the duty and responsibility of an owner to report to the ODW in the most expeditious manner (usually by telephone) under the following circumstances. If it is done by telephone a confirming report shall be mailed as soon as practical.

1. When a bacteriological examination shows a repeat sample is required (see 12VAC5-590-380 D), a report shall be made within 48 hours. An owner shall report a total coliform PMCL violation to the district engineer no later than the end of the next business day.

2. When the daily average of turbidity testing exceeds 5 NTU a report shall be made within 48 hours.

3. When a PMCL of an inorganic or organic chemical is exceeded for a single sample the owner shall report same within seven days. If any one sample result would cause the compliance average to be exceeded the owner shall report same in 48 hours.

4. When the average value of samples collected pursuant to 12VAC5-590-410 exceeds the PMCL of any organic or inorganic chemical the owner shall report same within 48 hours.

5. When the maximum contaminant level for radionuclides has been exceeded as determined by Table 2.5 the results shall be reported within 48 hours.

6. The owner shall report to the district engineer within 48 hours the failure to comply with the monitoring and sanitary survey requirements of this chapter.

7. The owner shall report to the district engineer within 48 hours the failure to comply with the requirements of any schedule prescribed pursuant to a variance or exemption.

8. The owner shall report a Tier 1 violation or situation, as described in 12VAC5-590-540 A 1, to the district engineer as soon as practical, but no later than 24 hours after the owner learns of the Tier 1 violation or situation. At the same time the report is made, the owner shall consult with the field office to determine the need for any additional actions to address the violation or situation.

9. The owner shall report a violation of treatment technique requirement resulting from a single exceedance of the maximum allowable turbidity limit, as described in 12VAC5-590-420 B 2 a (2), B 2 a (3) (b), B 2 b (2), B 2 c (2), and B 2 d, to the district engineer as soon as practical, but no later than 24 hours after the owner learns of the violation. At the same time the report is made, the owner shall consult with the field office to determine the need for any additional actions to address the violation or situation.

C. Reporting requirements for filtration treatment and disinfection treatment.

1. The owner of a waterworks that provides filtration treatment shall report monthly to the commissioner the following specified information beginning June 29, 1993, or when filtration is installed, whichever is later.

a. Turbidity measurements as required by 12VAC5-590-370 B 7 a shall be reported within 10 days after the end of each month the waterworks serves water to the public. Information that shall be reported includes:

(1) The total number of filtered water turbidity measurements taken during the month.

(2) The number and percentage of filtered water turbidity measurements taken during the month which are less than or equal to the turbidity limits specified in 12VAC5-590-420 B 2 for the filtration technology being used.

(3) The date and value of any turbidity measurements taken during the month which exceed 5 NTU.

b. The owner of a waterworks using surface water or groundwater under the direct influence of surface water that provides conventional filtration treatment or direct filtration shall report monthly to the commissioner the information specified in subdivisions C 1 a (1) and (2) of this section. Also, the owner of a waterworks that provides filtration approved under 12VAC5-590-420 B 2 d shall report monthly to the commissioner the information specified in subdivision C 1 a (1) of this section.

(1) Turbidity measurements as required by 12VAC5-590-420 B 2 a (3) shall be reported within 10 days after the end of each month the system serves water to the public. Information that shall be reported includes:

(a) The total number of filtered water turbidity measurements taken during the month.

(b) The number and percentage of filtered water turbidity measurements taken during the month that are less than or equal to the turbidity limits specified in 12VAC5-590-420 B 2 a (3) or 12VAC5-590-420 B 2 d.

(c) The date and value of any turbidity measurements taken during the month that exceed 1 NTU for systems using conventional filtration treatment or direct filtration, or that exceed the maximum level set by the commissioner under 12VAC590-420 B 2 d.

(2) The owner shall maintain the results of individual filter monitoring taken under 12VAC5-590-370 B 7 b (1) for at least three years. The owner shall report that he has conducted individual filter turbidity monitoring under 12VAC5-590-370 B 7 b (1) within 10 days after the end of each month the waterworks serves water to the public. Owners shall report individual filter turbidity measurement results taken under 12VAC5-590-370 B 7 b (1) within 10 days after the end of each month the waterworks serves water to the public only if measurements demonstrate one or more of the conditions in subdivisions C 1 b (2) (a) or (b) of this section. The owners of waterworks that use lime softening may apply to the commissioner for alternative exceedance levels for the levels specified in subdivisions C 1 b (2) (a) or (b) of this section if they can demonstrate that higher turbidity levels in individual filters are due to lime carryover only and not due to degraded filter performance.

(a) For waterworks serving 10,000 or more people:

(i) For any individual filter that has a measured turbidity level of greater than 1.0 NTU in two consecutive measurements taken 15 minutes apart, the owner shall report the filter number, the turbidity measurement, and the date, or dates, on which the exceedance occurred. In addition, the owner shall either produce a filter profile for the filter within seven days of the exceedance (if the owner is not able to identify an obvious reason for the abnormal filter performance) and report that the profile has been produced or report the obvious reason for the exceedance.

(ii) For any individual filter that has a measured turbidity level of greater than 0.5 NTU in two consecutive measurements taken 15 minutes apart at the end of the first four hours of continuous filter operation after the filter has been backwashed or otherwise taken offline, the owner shall report the filter number, the turbidity, and the date, or dates, on which the exceedance occurred. In addition, the owner shall either produce a filter profile for the filter within seven days of the exceedance (if the owner is not able to identify an obvious reason for the abnormal filter performance) and report that the profile has been produced or report the obvious reason for the exceedance.

(iii) For any individual filter that has a measured turbidity level of greater than 1.0 NTU in two consecutive measurements taken 15 minutes apart at any time in each of three consecutive months, the owner shall report the filter number, the turbidity measurement, and the date, or dates, on which the exceedance occurred. In addition, the owner shall conduct a self-assessment of the filter within 14 days of the exceedance and report that the self-assessment was conducted. The self-assessment shall consist of at least the following components: assessment of filter performance; development of a filter profile; identification and prioritization of factors limiting filter performance; assessment of the applicability of corrections; and preparation of a filter self-assessment report.

(iv) For any individual filter that has a measured turbidity level of greater than 2.0 NTU in two consecutive measurements taken 15 minutes apart at any time in each of two consecutive months, the owner shall report the filter number, the turbidity measurement, and the date, or dates, on which the exceedance occurred. In addition, the owner shall arrange for the conduct of a comprehensive performance evaluation by the commissioner or a third party approved by the commissioner no later than 30 days following the exceedance and have the evaluation completed and submitted to the commissioner no later than 90 days following the exceedance.

(b) For waterworks serving less than 10,000 people:

(i) For any individual filter (or the turbidity of combined filter effluent for systems with two filters that monitor combined filter effluent in lieu of individual filters) that has a measured turbidity level of greater than 1.0 NTU in two consecutive measurements taken 15 minutes apart, the owner shall report the filter number(s), the turbidity measurement(s), and the date, or dates, on which the exceedance occurred and the cause (if known) for the exceedance(s).

(ii) For any individual filter (or the turbidity of combined filter effluent for systems with two filters that monitor combined filter effluent in lieu of individual filters) that has a measured turbidity level of greater than 1.0 NTU in two consecutive measurements taken 15 minutes apart at any time in each of three consecutive months, the owner shall conduct a self-assessment of the filter(s) within 14 days of the day the filter exceeded 1.0 NTU unless a comprehensive performance evaluation as specified in paragraph (iii) of this section was required. Owners of waterworks with two filters that monitor the combined filter effluent in lieu of individual filters shall conduct a self assessment on both filters. The self-assessment shall be reported to the commissioner and consist of at least the following components: date self-assessment was triggered; date the self-assessment was completed; assessment of filter performance; development of a filter profile; identification and prioritization of factors limiting filter performance; assessment of the applicability of corrections; and preparation of a filter self-assessment report. The self assessment shall be submitted within 10 days after the end of the month or 14 days after the self assessment was triggered only if it was triggered during the last four days of the month.

(iii) For any individual filter (or the turbidity of combined filter effluent for systems with two filters that

monitor combined filter effluent in lieu of individual filters) that has a measured turbidity level of greater than 2.0 NTU in two consecutive measurements taken 15 minutes apart at any time in each of two consecutive months, the owner shall arrange for a comprehensive performance evaluation by the commissioner or a third party approved by the commissioner no later than 60 days following the day the filter exceeded 2.0 NTU in two consecutive months. The owner shall report within 10 days after the end of the month that a comprehensive performance evaluation is required and the date that it was triggered. If a comprehensive performance evaluation has been completed by the commissioner or a third party approved by the commissioner within the 12 prior months or the owner and the commissioner are jointly participating in an ongoing Comprehensive Technical Assistance project at the waterworks, a new comprehensive performance evaluation is not required. If conducted, a comprehensive performance evaluation shall be completed and submitted to the commissioner no later than 120 days following the day the filter exceeded 2.0 NTU in two consecutive measurements for the second straight month.

c. Reporting source water monitoring results.

(1) Owners shall report results from the source water monitoring required in 12VAC5-590-420 B 3 a no later than 10 days after the end of the first month following the month when the sample is collected.

(2) Owners shall report the applicable information in (a) and (b) as follows for the source water monitoring required in 12VAC5-590-420 B 3 a.

(a) Owners shall report the following data elements for each Cryptosporidium analysis:

Data element
PWS ID
Facility ID
Sample collection date
Sample type (field or matrix spike)
Sample volume filtered (L), to nearest ¼ L
Was 100% of filtered volume examined
Number of oocysts counted

(i) For matrix spike samples, the owner shall also report the sample volume spiked and estimated number of oocysts spiked. These data are not required for field samples.

(ii) For samples in which less than 10 L is filtered or less than 100% of the sample volume is examined, the owner shall also report the number of filters used and the packed pellet volume.

(iii) For samples in which less than 100% of sample volume is examined, the owner shall also report the volume of resuspended concentrate and volume of this resuspension processed through immunomagnetic separation.

(b) Owners shall report the following data elements for each E. coli analysis:

Data element
1. PWS ID
2. Facility ID
3. Sample collection date
4. Analytical method number
5. Method type
6. Source type (flowing stream, lake/reservoir, GUDI)
7. E. coli/100 mL
8. Turbidity[a]

[a]Owners of waterworks serving fewer than 10,000 people that are not required to monitor for turbidity under in 12VAC5-590-420 B 3 a are not required to report turbidity with their E. coli results.

2. Disinfection information specified below shall be reported to the district engineer within 10 days after the end of each month the waterworks serves water to the public. Information that shall be reported includes:

a. For each day, the lowest measurement of residual disinfectant concentration in mg/L in water entering the distribution system.

b. The date and duration of each period when the residual disinfectant concentration in water entering the distribution system fell below 0.2 mg/L and when the district engineer was notified of the occurrence.

c. The following information on the samples taken in the distribution system in conjunction with total coliform monitoring pursuant to 12VAC5-590-420 B.

(1) Number of instances where the residual disinfectant concentration is measured;

(2) Number of instances where the residual disinfectant concentration is not measured but HPC is measured;

(3) Number of instances where the residual disinfectant concentration is measured but not detected and no HPC is measured;

(4) Number of instances where no residual disinfectant concentration is detected and where HPC is greater than 500/mL;

(5) Number of instances where the residual disinfectant concentration is not measured and HPC is greater than 500/mL;

(6) For the current and previous month the system serves water to the public, the value of "V" in percent in the following formula:

$$V = \frac{c + d + e}{a + b} \text{ X } 100$$

a = the value in subdivision C 2 c (1) of this section

b = the value in subdivision C 2 c (2) of this section

c = the value in subdivision C 2 c (3) of this section

d = the value in subdivision C 2 c (4) of this section

e = the value in subdivision C 2 c (5) of this section

(7) If the division determines, based on site specific considerations, that a waterworks owner has no means for having a sample transported and analyzed for HPC by a certified laboratory within the requisite time and temperature conditions and that the waterworks is providing adequate disinfection in the distribution system, the requirements of subdivision C 2 c (1) through (6) of this section do not apply.

d. An owner need not report the data listed in subdivision C 2 a of this section if all data listed in subdivisions C 2 a through c of this section remain on file at the waterworks and the commissioner determines that the owner has submitted all of the information required by subdivisions C 2 a through c of this section for the last 12 months.

3. If at any time the chlorine residual falls below 0.2 mg/L in the water entering the distribution system, the owner shall notify the district engineer as soon as possible, but no later than by the end of the next business day. The owner also shall notify the district engineer by the end of the next business day whether or not the residual was restored to at least 0.2 mg/L within four hours.

D. Reporting requirements for lead and copper. All owners shall report all of the following information to the district engineer in accordance with this subsection.

1. Reporting requirements for tap water monitoring for lead and copper and for water quality parameter monitoring.

a. Except as provided in subdivision D 1 a (7) of this section, an owner shall report the information specified below for all tap water samples specified in ~~12VAC5-90-375-B~~ 12VAC5-590-375 B and for all water quality parameter samples specified in 12VAC5-590-375 C within the first 10 days following the end of each applicable monitoring period specified in 12VAC5-590-375 B and 12VAC5-590-375 C (i.e., every six months, annually, every three years, or every nine years). For monitoring periods with a duration less than six months, the end of the monitoring period is the last date samples can be collected during the period as specified in 12VAC5-590-375 B and 12VAC5-590-375 C.

(1) The results of all tap samples for lead and copper including location or a location site code and the criteria under 12VAC5-590-375 B 1 c through 12VAC5-590-375 B 1 f or 12VAC5-590-375 C under which the site was selected for the waterworks' sampling pool.

(2) Documentation for each tap water lead or copper sample for which the owner requests invalidation pursuant to 12VAC5-590-375 B 6.

(3) The 90th percentile lead and copper concentrations measured from among all lead and copper tap water samples collected during each monitoring period (calculated in accordance with 12VAC5-590-385 C) unless the district engineer calculates the 90th percentile lead and copper levels under subdivision D 8 of this section.

(4) With the exception of initial tap sampling conducted pursuant to 12VAC5-590-375 B 4 a, the owner shall designate any site that was not sampled during previous monitoring periods, and include an explanation of why sampling sites have changed;

(5) The results of all tap samples for pH, and where applicable, alkalinity, calcium, conductivity, temperature, and orthophosphate or silica collected under 12VAC5-590-375 C 2 through 12VAC5-590-375 C 5.

(6) The results of all samples collected at the entry point(s) to the distribution system for applicable water quality parameters under 12VAC5-590-375 C 2 through 12VAC5-590-375 C 5.

(7) The owner shall report the results of all water quality parameter samples collected under 12VAC5-590-375 C 3 through 12VAC5-590-375 C 6 during each six month monitoring period specified in 12VAC5-590-375 C 4 within the first ten days following the end of the monitoring period unless the commissioner has specified a more frequent reporting requirement.

b. The owner of a nontransient noncommunity waterworks, or a community waterworks meeting the criteria of 12VAC5-590-405 D 2 e, that does not have enough taps that can provide first-draw samples, must either:

(1) Provide written documentation to the commissioner identifying standing times and locations for enough non-first-draw samples to make up the sampling pool under

12VAC5-590-375 B 2 e by the start of the first applicable monitoring period under 12VAC5-590-375 B 4, unless the commissioner has waived prior approval of non-first-draw sample sites selected by the owner pursuant to 12VAC5-590-375 B 2 e; or

(2) If the commissioner has waived prior approval of non-first-draw sample sites selected by the owner, identify, in writing, each site that did not meet the six hour minimum standing time and the length of standing time for that particular substitute sample collected pursuant to 12VAC5-590-375 B 2 e and include this information with the lead and copper sample results required to be submitted pursuant to subdivision D 1 a (1) of this section.

c. At a time specified by the commissioner, or if no specific time is designated by the commissioner, then as early as possible prior to the addition of a new source or any long-term change in water treatment, an owner deemed to have optimized corrosion control under 12VAC5-590-405 A 2 b (3); an owner subject to reduced monitoring pursuant to 12VAC5-590-375 B 4 d; or an owner subject to a monitoring waiver pursuant to 12VAC5-590-375 B 7, shall submit written documentation to the district engineer describing the change or addition. The district engineer must review and the commissioner must approve the addition of a new source or a long-term change in treatment before it is implemented by the owner. Examples of long-term treatment changes include the addition of a new treatment process or modification of an existing treatment process. Examples of modification include switching secondary ~~contaminants~~ disinfectants, switching coagulants (e.g., alum to ferric chloride) , switching corrosion inhibitor products (e.g., orthophosphate to blended phosphate). Long-term changes can include dose changes to existing chemicals if the waterworks is planning long-term changes to its finished water pH or residual inhibitor concentration. Long-term treatment changes would not include chemical dose fluctuations associated with daily raw water quality changes.

d. The owner of any small waterworks applying for a monitoring waiver under 12VAC5-590-375 B 7 or subject to a waiver granted pursuant to 12VAC5-590-375 B 7 c, shall provide the following information to the commissioner in writing by the specified deadline:

(1) By the start of the first applicable monitoring period in 12VAC5-590-375 B 4, the owner of any small waterworks applying for a monitoring waiver shall provide the documentation required to demonstrate that it meets the waiver criteria of 12VAC5-590-375 B 7 a and 12VAC5-590-375 B 7 b.

(2) No later than nine years after the monitoring previously conducted pursuant to 12VAC5-590-375 B 7 b or 12VAC5-590-375 B 7 d (1), the owner of each small waterworks desiring to maintain its monitoring waiver shall provide the information required by 12VAC5-590-375 B 7 d (1) and 12VAC5-590-375 B 7 d (2).

(3) No later than 60 days after becoming aware that it is no longer free of lead-containing or copper-containing material, the owner of each small waterworks with a monitoring waiver shall provide written notification to the district engineer, setting forth the circumstances resulting in the lead-containing or copper-containing materials being introduced into the waterworks and what corrective action, if any, the owner plans to take to remove these materials.

e. The owner of each groundwater-source waterworks that limits water quality parameter monitoring to a subset of entry points under 12VAC5-590-375 C 3 c shall provide, by the commencement of such monitoring, written correspondence to the district engineer that identifies the selected entry points and includes information sufficient to demonstrate that the sites are representative of water quality and treatment conditions throughout the waterworks.

2. Water supply (source water) monitoring reporting requirements.

a. An owner shall report the sampling results for all source water samples collected in accordance with 12VAC5-590-375 D within the first 10 days following the end of each source water monitoring period (i.e., annually, per compliance period, per compliance cycle) specified in 12VAC5-590-375 D.

b. With the exception of the first round of source water sampling conducted pursuant to 12VAC5-590-375 D 2, the owner shall specify any site which was not sampled during previous monitoring periods, and include an explanation of why the sampling point has changed.

3. Corrosion control treatment reporting requirements. By the applicable dates under 12VAC5-590-405 A 2 (a), owners shall report the following information:

a. For owners demonstrating that they have already optimized corrosion control, information required in 12VAC5-590-405 A 2 b (2) or 12VAC5-590-405 A 2 b (3).

b. For owners required to optimize corrosion control, the owner's recommendation regarding optimal corrosion control treatment under 12VAC5-590-405 A 1 a.

c. For owners required to evaluate the effectiveness of corrosion control treatments under 12VAC5-590-405 A 1 c, the information required by that subdivision.

d. For owners required to install optimal corrosion control designated by the commissioner under 12VAC5-590-405 A 1 d, a letter certifying that the owner has completed installing that treatment.

4. Water supply source water treatment reporting requirements. By the applicable dates in 12VAC5-590-405 B, owners shall provide the following information to the district engineer:

a. If required under 12VAC5-590-405 B 2 a, the owner's recommendation regarding source water treatment;

b. For owners required to install source water treatment under 12VAC5-590-405 B 2 b, a letter certifying that the owner has completed installing the treatment designated by the commissioner within 24 months after the commissioner designated the treatment.

5. Lead service line replacement reporting requirements. Owners shall report the following information to the district engineer to demonstrate compliance with the requirements of 12VAC5-590-405 C:

a. No later than 12 months after the end of a monitoring period in which a waterworks exceeds the lead action level in sampling referred to in 12VAC5-590-405 C 1, the owner shall submit written documentation to the district engineer of the materials evaluation conducted as required in 12VAC5-590-375 B 1, to identify the initial number of lead service lines in the distribution system at the time the waterworks exceeds the lead action level, and provide the owner's schedule for annually replacing at least 7.0% of the initial number of lead service lines in its distribution system.

b. No later than 12 months after the end of a monitoring period in which a waterworks exceeds the lead action level in sampling referred to in 12VAC5-590-405 C 1, and every 12 months thereafter, the owner shall demonstrate to the district engineer in writing that the owner has either:

(1) Replaced in the previous 12 months at least 7.0% of the initial lead service lines (or a greater number of lines specified by the commissioner under 12VAC5-590-405 C 6) in the distribution system, or

(2) Conducted sampling that demonstrates that the lead concentration in all service line samples from an individual line(s), taken pursuant to 12VAC5-590-375 B 2 c, is less than or equal to 0.015 mg/L. In such cases, the total number of lines replaced and/or which meet the criteria in 12VAC5-590-405 C 4 shall equal at least 7.0% of the initial number of lead lines identified under subdivision D 5 a of this section (or the percentage specified by the commissioner under 12VAC5-590-405 C 6).

c. The annual letter submitted to the district engineer under subdivision D 5 b of this section shall contain the following information:

(1) The number of lead service lines scheduled to be replaced during the previous year of the waterworks' replacement schedule;

(2) The number and location of each lead service line replaced during the previous year of the waterworks' replacement schedule;

(3) If measured, the water lead concentration and location of each lead service line sampled, the sampling method, and the date of sampling.

d. The owner of any waterworks that collects lead service line samples following partial lead service line replacement required by 12VAC5-590-405 C shall report the results to the district engineer within the first ten days of the month following the month in which the owner receives the laboratory results, or as specified by the commissioner. Owners shall also report any additional information as specified by the commissioner, and in a time and manner prescribed by the commissioner, to verify that all partial lead service line replacement activities have taken place.

6. Public education program reporting requirements. Owners shall report the following information to the district engineer to demonstrate compliance with the requirements of 12VAC5-590-405 D.

a. The owner of any waterworks that is subject to the public education requirements in 12VAC5-590-405 D shall, within 10 days after the end of each period in which the owner is required to perform public education tasks in accordance with 12VAC5-590-405 D 2, send written notice to the district engineer that contains:

(1) A demonstration that the owner has delivered the public education materials that meet the content requirements of 12VAC5-590-405 D 1 and the delivery requirements of 12VAC5-590-405 D 2, and

(2) A list of all the newspapers, radio stations, television stations, and facilities and organizations to which the owner delivered public education materials during the period in which the owner was required to perform public education tasks.

b. Unless required by the commissioner, an owner who previously has submitted the information required by subdivision D 6 a (2) of this section need not resubmit the information required by subdivision D 6 a (2) of this section, as long as there has been no changes in the distribution list and the owner certifies that the public education materials were distributed to the same list submitted previously.

c. No later than three months following the end of the monitoring period, the owner shall mail a sample copy of the consumer notification of tap results to the district engineer along with a certification that the notification has ~~bee~~ been distributed in a manner consistent with the requirements of 12VAC5-590-405 D 4.

7. Reporting of additional monitoring data. The owner of any waterworks which collects sampling data in addition to that required by 12VAC5-590-375 shall report the results to the district engineer within the first 10 days following the end of the applicable monitoring period under 12VAC5-590-375 B, 12VAC5-590-375 C, and 12VAC5-590-375 D during which the samples are collected.

8. Reporting of the 90th percentile lead and copper concentrations where the district engineer calculates a waterworks' 90th percentile concentrations. An owner is not required to report the 90th percentile lead and copper concentrations measured from among all lead and copper tap samples collected during each monitoring period, as required by subdivision D 1 a (4) of this section if:

a. The commissioner has previously notified the owner that the district engineer will calculate the waterworks' 90th percentile lead and copper concentrations, based on the lead and copper tap results submitted pursuant to subdivision D 8 b (1) of this section, and has specified a date before the end of the applicable monitoring period by which the owner shall provide the results of the lead and copper tap water samples;

b. The owner has provided the following information to the district engineer by the date specified in subdivision D 8 a of this section:

(1) The results of all tap samples for lead and copper including the location of each site and the criteria under 12VAC5-590-375 B 1 c through 12VAC5-590-375 B 1 f or 12VAC5-590-375 B 1 g under which the site was selected for the waterworks sampling pool, pursuant to subdivision D 1 a (1) of this section;

(2) An identification of sampling sites utilized during the current monitoring period that were not sampled during the previous monitoring periods, and an explanation why sampling sites have changed; and

(3) The district engineer has provided the results of the 90th percentile lead and copper calculations, in writing, to the owner before the end of the monitoring period.

E. Reporting requirements for disinfection byproducts. Owners shall report the following information in accordance with subsection A of this section. (The district engineer may choose to perform calculations and determine whether the PMCL was violated, in lieu of having the owner report that information):

1. Running Annual Average Reporting:

a. The owner of a waterworks monitoring for TTHM and HAA5 under the requirements of 12VAC5-590-370 B 3 e (1) on a quarterly or more frequent basis shall report:

(1) The number of samples taken during the last quarter.

(2) The location, date, and result of each sample taken during the last quarter.

(3) The arithmetic average of all samples taken in the last quarter.

(4) The annual arithmetic average of the quarterly arithmetic averages of this section for the last four quarters.

(5) Whether, based on 12VAC5-590-410 C 2 b (1) (a), the PMCL was violated.

b. The owner of a waterworks monitoring for TTHMs and HAA5 under the requirements of 12VAC5-590-370 B 3 e (1) less frequently than quarterly (but at least annually) shall report:

(1) The number of samples taken during the last year.

(2) The location, date, and result of each sample taken during the last monitoring period.

(3) The arithmetic average of all samples taken over the last year.

(4) Whether, based on 12VAC5-590-410 C 2 b (1) (a) the PMCL was violated.

c. The owner of a waterworks monitoring for TTHMs and HAA5 under the requirements of 12VAC5-590-370 B 3 e (1) less frequently than annually shall report:

(1) The location, date, and result of the last sample taken.

(2) Whether, based on 12VAC5-590-410 C 2 b (1) (a), the PMCL was violated.

2. Locational Running Annual Average (LRAA) Reporting:

a. Owners shall report the following information for each monitoring location to the commissioner:

(1) Number of samples taken during the last quarter.

(2) Date and results of each sample taken during the last quarter.

(3) Arithmetic average of quarterly results for the last four quarters for each LRAA, beginning at the end of the fourth calendar quarter that follows the compliance date and at the end of each subsequent quarter. If the LRAA calculated based on fewer than four quarters of data would cause the PMCL to be exceeded regardless of the monitoring results of subsequent quarters, the owner shall report this information to the commissioner as part of the first report due following the compliance date or

anytime thereafter that this determination is made. If the owner is required to conduct monitoring at a frequency that is less than quarterly, the owner shall make compliance calculations beginning with the first compliance sample taken after the compliance date, unless the owner is required to conduct increased monitoring under 12VAC5-590-370 B 3 e (3) (g).

(4) Whether, based on Table 2.13, the PMCL was violated at any monitoring location.

(5) Any operational evaluation levels, under 12VAC5-590-410 C 2 b (1) (b) (iv), that were exceeded during the quarter and, if so, the location and date, and the calculated TTHM and HAA5 levels.

b. Owners of waterworks using surface water or GUDI seeking to qualify for or remain on reduced TTHM/HAA5 monitoring shall report the following source water TOC information for each treatment plant that treats surface water or ground water under the direct influence of surface water to the commissioner within 10 days of the end of any quarter in which monitoring is required:

(1) The number of source water TOC samples taken each month during last quarter.

(2) The date and result of each sample taken during last quarter.

(3) The quarterly average of monthly samples taken during last quarter or the result of the quarterly sample.

(4) The running annual average (RAA) of quarterly averages from the past four quarters.

(5) Whether the RAA exceeded 4.0 mg/L.

3. The owner of a waterworks monitoring for chlorite under the requirements of 12VAC5-590-370 B 3 f shall report:

a. The number of entry point samples taken each month for the last three months.

b. The location, date, and result of each sample (both entry point and distribution system) taken during the last quarter.

c. For each month in the reporting period, the arithmetic average of all samples taken in each three sample set taken in the distribution system.

d. Whether, based on 12VAC5-590-410 C 2 b, the PMCL was violated, in which month and how many times it was violated each month.

4. The owner of a waterworks monitoring for bromate under the requirements of 12VAC5-590-370 B 3 g shall report:

a. The number of samples taken during the last quarter.

b. The location, date, and result of each sample taken during the last quarter.

c. The arithmetic average of the monthly arithmetic averages of all samples taken in the last year.

d. Whether, based on 12VAC5-590-410 C 2 b, the PMCL was violated.

F. Reporting requirements for disinfectants. Owners shall report the information specified below in accordance with subsection A of this section. (The district engineer may choose to perform calculations and determine whether the MRDL was violated, in lieu of having the owner report that information):

1. The owner of a waterworks monitoring for chlorine or chloramines under the requirements of 12VAC5-590-370 B 3 h shall report:

a. The number of samples taken during each month of the last quarter.

b. The monthly arithmetic average of all samples taken in each month for the last 12 months.

c. The arithmetic average of all monthly averages for the last 12 months.

d. Whether, based on 12VAC5-590-410 C 2 c, the MRDL was violated.

2. The owner of a waterworks monitoring for chlorine dioxide under the requirements of 12VAC5-590-370 B 3 h shall report:

a. The dates, results, and locations of samples taken during the last quarter.

b. Whether, based on 12VAC5-590-410 C 2 c, the MRDL was violated.

c. Whether the MRDL was exceeded in any two consecutive daily samples and whether the resulting violation was acute or nonacute.

G. Reporting requirements for disinfection byproduct precursors and enhanced coagulation or enhanced softening. Owners shall report the following information in accordance with subsection A of this section. (The district engineer may choose to perform calculations and determine whether the treatment technique was met, in lieu of having the owner report that information):

1. The owner of a waterworks monitoring monthly or quarterly for TOC under the requirements of 12VAC5-590-370 B 3 i and required to meet the enhanced coagulation or enhanced softening requirements in 12VAC5-590-420 H 2 b or c shall report:

a. The number of paired (source water and treated water) samples taken during the last quarter.

b. The location, date, and results of each paired sample and associated alkalinity taken during the last quarter.

c. For each month in the reporting period that paired samples were taken, the arithmetic average of the percent reduction of TOC for each paired sample and the required TOC percent removal.

d. Calculations for determining compliance with the TOC percent removal requirements, as provided in 12VAC5-590-420 H 3 a.

e. Whether the system is in compliance with the enhanced coagulation or enhanced softening percent removal requirements in 12VAC5-590-420 H 2 a for the last four quarters.

2. The owner of a waterworks monitoring monthly or quarterly for TOC under the requirements of 12VAC5-590-370 B 3 i and meeting one or more of the alternative compliance criteria in 12VAC5-590-420 H 1 b or c shall report:

a. The alternative compliance criterion that the system is using.

b. The number of paired samples taken during the last quarter.

c. The location, date, and result of each paired sample and associated alkalinity taken during the last quarter.

d. The running annual arithmetic average based on monthly averages (or quarterly samples) of source water TOC for systems meeting a criterion in 12VAC5-590-420 H 1 b (1) or (3) or of treated water TOC for systems meeting the criterion in 12VAC5-590-420 H 1 b (2).

e. The running annual arithmetic average based on monthly averages (or quarterly samples) of source water SUVA for systems meeting the criterion in 12VAC5-590-420 H 1 b (5) or of treated water SUVA for systems meeting the criterion in 12VAC5-590-420 H 1 b (6).

f. The running annual average of source water alkalinity for systems meeting the criterion in 12VAC5-590-420 H 1 b (3) and of treated water alkalinity for systems meeting the criterion in 12VAC5-590-420 H 1 c (1).

g. The running annual average for both TTHM and HAA5 for systems meeting the criterion in 12VAC5-590-420 H 1 b (3) or (4).

h. The running annual average of the amount of magnesium hardness removal (as $CaCO_3$, in mg/L) for systems meeting the criterion in 12VAC5-590-420 H 1 c (2).

i. Whether the system is in compliance with the particular alternative compliance criterion in 12VAC5-590-420 H 1 b or c.

H. Reporting of analytical results to the district engineer will not be required in instances where the state laboratory performs the analysis and reports same to the district engineer.

I. Recycle flow reporting requirements. The owner of any waterworks supplied by a surface water source and waterworks supplied by a groundwater source under the direct influence of surface water that employs conventional filtration or direct filtration treatment shall notify the commissioner in writing by December 8, 2003, if the system recycles spent filter backwash water, thickener supernatant, or liquids from dewatering processes. This notification shall include, as a minimum:

1. A plant schematic showing the origin of all flows that are recycled, including but not limited to spent filter backwash water, thickener supernatant, and liquids from dewatering processes. The schematic shall also specify the hydraulic conveyance used to transport all recycle flows and the location where recycle flows are reintroduced back into the treatment plant.

2. Typical recycle flow in gallons per minute (gpm), the highest observed plant flow experienced in the previous year (gpm), design flow for the treatment plant (gpm), and state-approved operating capacity for the plant.

J. Reporting of requirements for enhanced treatment for cryptosporidium.

1. Owners shall report sampling schedules under 12VAC5-590-420 B 3 a (5) and source water monitoring results under 12VAC5-590-530 C 1 c unless they notify the commissioner that they will not conduct source water monitoring due to meeting the criteria of 12VAC5-590-420 B 3 a (4).

2. Owners shall report the use of uncovered finished water storage facilities to the commissioner as described in 12VAC5-590-420 L.

3. Owners of waterworks that provide filtration shall report their Cryptosporidium bin classification as described in 12VAC-590-420 B 3 c.

4. Owners shall report disinfection profiles and benchmarks to the commissioner as described in 12VAC5-590-420 B 3 b (1) through (2) prior to making a significant change in disinfection practice.

5. Owners shall report to the commissioner in accordance with the following table for any microbial toolbox options used to comply with treatment requirements under 12VAC5-590-420 B 3 c (2). Alternatively, the commissioner may approve a waterworks to certify operation within required parameters for treatment credit rather than reporting monthly operational data for toolbox options.

Microbial Toolbox Reporting Requirements

Toolbox option	Owners shall submit the following information	On the following schedule
~~Watershed control program (WCP)~~	~~Notice of intention to develop a new or continue an existing watershed control program~~	~~No later than two years before the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).~~
	~~Watershed control plan~~	~~No later than one year before the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).~~
	~~Annual watershed control program status report~~	~~Every 12 months, beginning one year after the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).~~
	~~Watershed sanitary survey report~~	~~For community waterworks, every three years beginning three years after the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3). For noncommunity waterworks, every five years beginning five years after the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).~~
Alternative source/intake management	Verification that waterworks has relocated the intake or adopted the intake withdrawal procedure reflected in monitoring results	No later than the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).
Presedimentation	Monthly verification of the following: (i) Continuous basin operation (ii) Treatment of 100% of the flow (iii) Continuous addition of a coagulant (iv) At least 0.5-log mean reduction of influent turbidity or compliance with alternative performance criteria approved by the commissioner~~.~~	Monthly reporting within 10 days following the month in which the monitoring was conducted, beginning on the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).
Two-stage lime softening	Monthly verification of the following: (i) Chemical addition and hardness precipitation occurred in two separate and sequential softening stages prior to filtration (ii) Both stages treated 100% of the plant flow	Monthly reporting within 10 days following the month in which the monitoring was conducted, beginning on the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).
Bank filtration	Initial demonstration of the following: (i) Unconsolidated, predominantly sandy aquifer (ii) Setback distance of at least 25 ft. (0.5-log credit) or 50 ft. (1.0-log credit)	No later than the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).
	If monthly average of daily max turbidity is greater than 1 NTU then system shall report result and submit an assessment of the cause~~.~~	Report within 30 days following the month in which the monitoring was conducted, beginning on the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).

Combined filter performance	Monthly verification of combined filter effluent (CFE) turbidity levels less than or equal to 0.15 NTU in at least 95% of the four-hour CFE measurements taken each month	Monthly reporting within 10 days following the month in which the monitoring was conducted, beginning on the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).
Individual filter performance	Monthly verification of the following: (i) Individual filter effluent (IFE) turbidity levels less than or equal to 0.15 NTU in at least 95% of samples each month in each filter (ii) No individual filter greater than 0.3 NTU in two consecutive readings 15 minutes apart	Monthly reporting within 10 days following the month in which the monitoring was conducted, beginning on the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).
Demonstration of performance	Results from testing following a protocol approved by the commissioner.	No later than the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).
	(ii) As required by the commissioner, monthly verification of operation within conditions of commissioner approval for demonstration of performance credit	Within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).
Bag filters and cartridge filters	Demonstration that the following criteria are met: (i) Process meets the definition of bag or cartridge filtration (ii) Removal efficiency established through challenge testing that meets criteria in 12VAC5-590-420 B 3 d (6) (a).	No later than the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).
	Monthly verification that 100% of plant flow was filtered	Within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).
Membrane filtration	Results of verification testing demonstrating the following: (i) Removal efficiency established through challenge testing that meets criteria in subsection J of this section (ii) Integrity test method and parameters, including resolution, sensitivity, test frequency, control limits, and associated baseline	No later than the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).
	Monthly report summarizing the following: (i) All direct integrity tests above the control limit; (ii) If applicable, any turbidity or alternative indirect integrity monitoring approved by the commissioner results triggering direct integrity testing and the corrective action	Within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).

	that was taken	
Second stage filtration	Monthly verification that 100% of flow was filtered through both stages and that first stage was preceded by a coagulation step	Within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).
Slow sand filtration (as secondary filter)	Monthly verification that both a slow sand filter and a preceding separate stage of filtration treated 100% of flow from surface water or groundwater under the direct influence of surface water sources.	Within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).
Chlorine dioxide	Summary of CT values for each day as described in 12VAC5-590-420 B 3 d (7)(b)(i).	Within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).
Ozone	Summary of CT values for each day as described in 12VAC5-590-420 B 3 d (7)(b)(ii).	Within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).
UV	Validation test results demonstrating operating conditions that achieve required UV dose	No later than the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).
	Monthly report summarizing the percentage of water entering the distribution system that was not treated by UV reactors operating within validated conditions for the required dose as specified in 12VAC5-590-420 B 3 d (7) (c).	Within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date in 12VAC5-590-420 B 3 c (3).

K. Reporting requirements for groundwater systems. Owners of groundwater systems shall report the following information in accordance with subsection A of this section.

1. Owners of groundwater systems conducting compliance monitoring as required by 12VAC5-590-421 C shall notify the ODW as soon as possible any time the groundwater system fails to meet the ODW specified minimum residual disinfectant concentration for more than four hours, but no later than the next business day.

2. Owners of groundwater systems that are required to conduct corrective action as described in 12VAC5-590-421 A shall notify the ODW within 30 days of completion of corrective action.

3. Owners of groundwater systems subject to the source monitoring requirements of 12VAC5-590-379 that do not conduct this monitoring under the provision of 12VAC5-590-380 E, shall provide documentation to the ODW within 30 days of the collection that the sample met the criteria defined in 12VAC5-590-380 E.

~~K.~~ L. Information to be included on the operation monthly report shall be determined by the commissioner for each waterworks on an individual basis. Appendix G contains suggested monthly operation report requirements.

12VAC5-590-540. Public notices.

A. All owners shall give public notice to (i) persons served by the waterworks and (ii) the owner of any consecutive waterworks to which it sells or otherwise provides water under the following circumstances:

1. Tier 1.

a. Violation of the PMCL for total coliforms when fecal coliform or E. coli are present in the distribution system;

b. Failure to test for fecal coliforms or E. coli when any repeat sample tests positive for coliform;

c. Violation of the PMCL for nitrate, nitrite, or total nitrate and nitrite;

d. Failure to take a confirmation sample within 24 hours of the waterworks receipt of the first sample showing an exceedance of the nitrate or nitrite PMCL;

e. Exceedance of the nitrate PMCL by noncommunity waterworks, where permitted to exceed the PMCL by the commissioner;

f. Violation of the MRDL for chlorine dioxide when one or more samples taken in the distribution system the day following an exceedance of the MRDL at the entry point of the distribution system exceed the MRDL;

g. Failure to monitor chlorine dioxide residuals in the distribution system the day following an exceedance of the chlorine dioxide MRDL at the entrance to the distribution system;

h. Violation of the treatment technique requirements for filtration and disinfection resulting from a single exceedance of the maximum allowable turbidity limit, where the commissioner determines after consultation that a Tier 1 notice is required;

i. Failure to consult with the commissioner within 24 hours after the owner learns of the violation of the treatment technique requirements for filtration and disinfection resulting from a single exceedance of the maximum allowable turbidity limit;

j. Occurrence of a waterborne disease outbreak or other waterborne emergency (such as a failure or significant interruption in key water treatment processes, a natural disaster that disrupts the water supply or distribution system, or a chemical spill or unexpected loading of possible pathogens into the source water that significantly increases the potential for drinking water contamination);

k. Detection of E. coli~~, enterococci, or coliphage~~ in groundwater source samples;

l. Other violations or situations with significant potential to have serious adverse effects on human health as a result of short-term exposure, as determined by the commissioner on a case-by-case basis.

2. Tier 2.

a. All violations of the PMCL, MRDL, and treatment technique requirements, except where a Tier 1 public notice is required or where the commissioner determines that a Tier 1 notice is required per subdivision A 1 l of this subsection;

b. Violations of the monitoring and testing procedure requirements, where the commissioner determines that a Tier 2 rather than a Tier 3 public notice is required, taking into account potential health impacts and persistence of the violation;

c. Failure to comply with the terms and conditions of any variance or exemption in place;

d. Failure to take corrective action or failure to maintain at least four-log treatment of viruses (using inactivation, removal, or an approved combination of four-log virus inactivation and removal) before or at the first customer under the treatment technique requirements for waterworks with groundwater sources.

3. Tier 3.

a. Monitoring violations, except where a Tier 1 public notice is required per subdivisions 1 d and 1 g of this subsection, or where the commissioner determines that a Tier 2 public notice is required per subdivision 2 b of this subsection;

b. Failure to comply with a testing procedure, except where a Tier 1 notice is required per subdivision 1 b of this subsection or where the commissioner determines that a Tier 2 notice is required per subdivision 2 b of this subsection;

c. Operation under a variance or an exemption to a PMCL or treatment technique requirement;

d. Availability of unregulated contaminant monitoring results; and

e. Exceedance of the fluoride secondary maximum contaminant level (SMCL).

B. If a waterworks has a violation, failure, exceedance, or situation in a portion of the distribution system that is physically or hydraulically isolated from other parts of the distribution system, the commissioner may allow the owner to limit distribution of the public notice to only those persons served by that portion of the waterworks which is out of compliance. The decision granting limited distribution of the public notice shall be issued in writing.

C. Public notice distribution requirements.

1. For Tier 1 violations, exceedances, or situations, the owner shall:

a. Provide a public notice as soon as practical but no later than 24 hours after the owner learns of the violation, exceedance, or situation;

b. Initiate consultation with the commissioner as soon as practical, but no later than 24 hours after the owner learns of the violation or situation, to determine additional public notice requirements;

c. Comply with any additional public notice requirements, including any repeat notices or direction on the duration of the posted notices, that are established as a result of the consultation with the commissioner. Such requirements may include the timing, form, manner, frequency, and content of repeat notices (if any) and other actions designed to reach all persons served; and

d. Provide the public notice in a form and manner reasonably calculated to reach all persons served. The form and manner shall fit the specific situation, and shall be designed to reach residential, transient, and non-transient users of the waterworks. In order to reach all

persons served, owners shall use, at a minimum, one or more of the following forms of delivery:

(1) Appropriate broadcast media (such as radio and television);

(2) Posting of the public notice in conspicuous locations throughout the area served by the waterworks;

(3) Hand delivery of the public notice to persons served by the water system; or

(4) Another delivery method approved in writing by the commissioner.

2. For Tier 2 violations, exceedances, or situations the owner shall:

a. Provide the public notice as soon as practical, but no later than 30 days after the owner learns of the violation, exceedance, or situation. The commissioner may allow, on a case-by-case determination, additional time for the initial notice of up to three months from the date the owner learns of the violation, exceedance, or situation; however, the commissioner shall not grant an extension to the 30-day deadline for any unresolved violation.

b. Repeat the public notice every three months as long as the violation, exceedance, or situation persists, unless the commissioner determines that appropriate circumstances warrant a different repeat notice frequency. In no circumstance shall the repeat notice be given less frequently than once per year. Repeat notice frequency less than every three months shall not be allowed for (i) a PMCL violation total coliforms; (ii) a treatment technique violation for filtration and disinfection; and (iii) other ongoing violations, exceedances, or situations.

c. Consult with the commissioner as soon as practical but no later than 24 hours after the owner learns of a violation of the treatment technique requirements for filtration and disinfection resulting from a single exceedance of the maximum allowable turbidity limit to determine whether a Tier 1 public notice is required to protect public health. If consultation does not take place within the 24-hour period, the owner shall distribute a Tier 1 public notice of the violation within the next 24 hours (i.e., no later than 48 hours after the owner learns of the violation).

d. Provide the initial public notice and any repeat notices in a form and manner that is reasonably calculated to reach persons served in the required time period.

(1) For community waterworks, the owner shall:

(a) Mail or otherwise directly deliver the public notice to each customer receiving a bill and to other service connections to which water is delivered by the waterworks; and

(b) Use any other distribution method reasonably calculated to reach other persons regularly served by the waterworks, if they would not normally be reached by the notice required in subdivision 2 d (1) (a) of this subsection. Such persons may include those who do not pay water bills or do not have service connection addresses (e.g., house renters, apartment dwellers, university students, nursing home patients, prison inmates, etc.). Other methods may include: Publication in a local newspaper; delivery of multiple copies for distribution by customers that provide their drinking water to others (e.g., apartment building owners or large private employers); posting in public places served by the system or on the Internet; or delivery to community organizations.

(2) For noncommunity waterworks, the owner shall:

(a) Post the public notice in conspicuous locations throughout the distribution system frequented by persons served by the waterworks, or by mail or direct delivery to each customer and service connection (where known); and

(b) Use any other method reasonably calculated to reach other persons served by the system if they would not normally be reached by the notice required in subdivision 2 d (2) (a) of this subsection. Such persons may include those served who may not see a posted notice because the posted notice is not in a location they routinely pass by.

Other methods may include publication in a local newspaper or newsletter distributed to customers, use of e-mail to notify employees or students, or delivery of multiple copies in central locations (e.g., community centers).

e. Maintain a posted public notice in place for as long as the violation, exceedance, or situation persists, but in no case for less than seven days, even if the violation, exceedance, or situation is resolved.

3. For Tier 3 violations, exceedances, or situations the owner shall:

a. Provide the public notice not later than one year after the owner learns of the violation, exceedance, or situation or begins operating under a variance or exemption.

b. Repeat the public notice annually for as long as the violation, exceedance, variance, exemption, or other situation persists.

c. Maintain a posted public notice in place for as long as the violation, exceedance, variance, exemption, or other situation persists, but in no case less than seven days even if the violation or situation is resolved.

d. Instead of individual Tier 3 public notices, the owner may use an annual report detailing all violations,

exceedances, and situations that occurred during the previous twelve months, as long as the timing requirements of subdivision 3 a of this subsection are met. For community waterworks the Consumer Confidence Report (CCR) may be used as a vehicle for the initial Tier 3 public notice and all required repeat notices, provided:

(1) The CCR is provided to persons served by the waterworks no later than 12 months after the owner learns of the violation, exceedance, or other situation;

(2) The Tier 3 public notice contained in the CCR meets the content requirements in subsection E of this section.

(3)The CCR is distributed in a manner meeting the delivery requirements in subdivision D 3 e of this section.

e. For community waterworks the owner shall:

(1) Mail or otherwise directly deliver the public notice to each customer receiving a bill and to other service connections to which water is delivered by the waterworks; and

(2) Use any other method reasonably calculated to reach other persons regularly served by the system, if they would not normally be reached by the notice required in subdivision 3 e (1) of this subsection. Such persons may include those who do not pay water bills or do not have service connection addresses (e.g., house renters, apartment dwellers, university students, nursing home patients, prison inmates, etc.). Other methods may include publication in a local newspaper, delivery of multiple copies for distribution by customers that provide their drinking water to others (e.g., apartment building owners or large private employers), posting in public places or on the Internet, or delivery to community organizations.

f. For noncommunity waterworks the owner shall:

(1) Post the public notice in conspicuous locations throughout the distribution system frequented by persons served by the waterworks, or by mail or direct delivery to each customer and service connection (where known); and

(2) Use any other method reasonably calculated to reach other persons served by the system, if they would not normally be reached by the notice required in subdivision 3 f (1) of this subsection. Such persons may include those who may not see a posted notice because the notice is not in a location they routinely pass by. Other methods may include: Publication in a local newspaper or newsletter distributed to customers; use of E-mail to notify employees or students; or, delivery of multiple copies in central locations (e.g., community centers).

D. Public notice contents.

1. Each public notice for PMCL, MRDL, and TT violations and other situations requiring a public notice shall include the following elements:

a. A description of the violation, exceedance, or situation, including the contaminant(s) of concern, and (as applicable) the contaminant level(s);

b. When the violation or situation occurred;

c. Any potential adverse health effects from the violation, exceedance, or situation, including the standard language under subdivision 5 a or 5 b of this subsection, whichever is applicable;

d. The population at risk, including subpopulations particularly vulnerable if exposed to the contaminant in their drinking water;

e. Whether alternative water supplies should be used;

f. What actions consumers should take, including when they should seek medical help, if known;

g. What the owner is doing to correct the violation, exceedance, or situation;

h. When the owner expects the waterworks to return to compliance or resolve the situation;

i. The name, business address, and phone number of the owner, operator, or designee as a source of additional information concerning the notice; and

j. A statement to encourage the notice recipient to distribute the public notice to other persons served, using the standard language under subdivision 5 c of this subsection, where applicable.

2. Each public notice for a waterworks that has been granted a variance or exemption shall include the following elements:

a. An explanation of the reasons for the variance or exemption;

b. The date on which the variance or exemption was issued;

c. A brief status report on the steps the owner is taking to install treatment, find alternative sources of water, or otherwise comply with the terms and schedules of the variance or exemption; and

d. A notice of any opportunity for public input in the review of the variance or exemption.

3. Each public notice for a waterworks that violates the conditions of a variance or exemption shall contain the ten elements listed in subdivision 1 of this subsection.

4. Each public notice shall:

a. Be displayed in a conspicuous way when printed or posted;

b. Not contain overly technical language or very small print;

c. Not be formatted in a way that defeats the purpose of the notice;

d. Not contain language which nullifies the purpose of the notice.

e. Contain information in the appropriate language(s), for waterworks serving a large proportion of non-English speaking consumers, regarding the importance of the notice or contain a telephone number or address where persons served may contact the owner to obtain a translated copy of the notice or to request assistance in the appropriate language.

5. The public notice shall include the following standard language:

a. For PMCL or MRDL violations, treatment technique violations, and violations of the condition of a variance or exemption--standard health effects language as specified in Appendix O corresponding to each PMCL, MRDL, and treatment technique violation and for each violation of a condition of a variance or exemption.

b. For monitoring and testing procedure violations -- standard language as specified below, including the language necessary to fill in the blanks:

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During (compliance period), we (did not monitor or test or did not complete all monitoring or testing) for (contaminant(s)), and therefore cannot be sure of the quality of your drinking water during that time.

c. For all public notices--standard language (where applicable), as specified below:

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

E. Public notice to new billing units or customers.

1. For community waterworks the owner shall give a copy of the most recent public notice for any continuing violation, variance or exemption, or other ongoing situations requiring a public notice to all new billing units or new customers prior to or at the time service begins.

2. For noncommunity waterworks the owner shall continuously post the public notice in conspicuous locations in order to inform new consumers of any continuing violation, variance or exemption, or other situation requiring a public notice for as long as the violation, variance, exemption, or other situation persists.

F. Special notice of the availability of unregulated contaminant monitoring results.

1. The owner of a community waterworks or non-transient, noncommunity waterworks shall notify persons served by the system of the availability of the results of such sampling no later than 12 months after the monitoring results are known.

2. The special notice shall meet the requirements for a Tier 3 public notice and shall identify a person and telephone number to contact for information on the monitoring results.

G. Special notice for exceedance of the SMCL for fluoride.

1. Community waterworks that exceed the SMCL of 2 mg/L, but do not exceed the PMCL of 4 mg/L for fluoride, shall provide public notice to persons served as soon as practical but no later than 12 months from the day the owner learns of the exceedance.

2. A copy of the notice shall be sent to all new billing units and new customers at the time service begins and to the district engineer.

3. The owner shall repeat the notice at least annually for as long as the SMCL is exceeded.

4. If the public notice is posted, the notice shall remain in place for as long as the SMCL is exceeded, but in no case less than seven days even if the exceedance is eliminated.

5. On a case-by-case basis, the commissioner may require an initial notice sooner than 12 months and repeat notices more frequently than annually.

6. The form and manner of the public notice (including repeat notices) shall meet the requirements for a Tier 3 public notice.

7. The public notice shall contain the following language, including the language necessary to fill in the blanks:

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/L) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by your community waterworks (name) has a fluoride concentration of (insert value) mg/L. Dental fluorosis, in its moderate or severe forms, may result in a brown

staining and/or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the excess fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products by young children. Older children and adults may safely drink the water. Drinking water containing more than 4 mg/L of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/L of fluoride, but we are required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/L because of this cosmetic dental problem. For more information, please call (name of water system contact) of (name of community waterworks) at (phone number). Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-NSF-HELP.

H. Special notice for nitrate exceedances above PMCL by noncommunity waterworks.

1. The owner of a noncommunity waterworks granted permission by the commissioner to exceed the nitrate PMCL shall provide public notice to persons served meeting the requirements for a Tier 1 notice.

2. The public notice shall be posted continuously and shall indicate the fact that nitrate levels exceed 10 mg/L and the potential health effects of exposure, meeting the requirements for Tier 1 public notice delivery and content.

I. Special notice for repeated failure to conduct sampling of the source water for Cryptosporidium.

1. An owner who is required to sample source water shall provide public notice to persons served when he has failed to collect any three months of required samples. The form and manner of the public notice shall satisfy the requirements of a Tier 2 notice, and the notice shall be repeated in accordance with the requirements of a Tier 2 notice.

2. The notice shall contain the following language, including the language to fill in the blanks:

We are required to monitor the source of your drinking water for Cryptosporidium. Results of the monitoring are to be used to determine whether water treatment at the [blank – fill in treatment plant name] is sufficient to adequately remove Cryptosporidium from your drinking water. We are required to complete this monitoring and make this determination by [blank – fill in required bin determination date]. We "did not monitor" or "did not complete all monitoring or testing" on schedule and, therefore, we may not be able to determine by the required date what treatment modifications, if any, shall be made to ensure adequate Cryptosporidium removal. Missing this deadline may, in turn, jeopardize our ability to have the required treatment modifications, if any, completed by the deadline required, [blank – fill in date].

For more information, please call [blank – fill in name of waterworks contact] of [blank – fill in name of waterworks] at [blank – fill in phone number].

3. The notice shall contain a description of what the owner is doing to correct the violation and when the owner expects the waterworks to return to compliance or resolve the situation.

J. Special notice for failure to determine bin classification or mean Cryptosporidium level.

1. An owner who is required to determine a bin classification or to determine mean Cryptosporidium level shall provide public notice to persons served when the determination has not been made as required. The form and manner of the public notice shall satisfy the requirements of a Tier 2 notice, and the notice shall be repeated in accordance with the requirements of a Tier 2 notice. However, a public notice is not required if the owner is complying with a schedule to address the violation approved by the ODW.

2. The notice shall contain the following language, including the language to fill in the blanks:

We are required to monitor the source of your drinking water for Cryptosporidium in order to determine by [blank – fill in date] whether water treatment at the [blank – fill in treatment plant name] is sufficient to adequately remove Cryptosporidium from you drinking water. We have not made this determination by the required date. Our failure to do this may jeopardize our ability to have the required treatment modifications, if any, completed by the required deadline of [blank – fill in date]. For more information, please call [blank – fill in name of waterworks contact] of [blank – fill in name of waterworks] at [blank – fill in telephone number].

3. The notice shall contain a description of what the owner is doing to correct the violation and when the owner expects the waterworks to return to compliance or resolve the situation.

K. Special notice for significant deficiencies by noncommunity groundwater systems.

1. Any owner of a noncommunity groundwater system who has not corrected a significant deficiency within one year of being notified by the ODW shall provide public notice to the consumers.

2. The form and manner of the public notice shall satisfy the requirements of a Tier 2 notice.

3. The owner shall continue to notify the public annually until the requirements of 12VAC5-590-421 have been satisfied. The notice shall include:

a. The nature of the significant deficiency and the date it was identified by the ODW; and

b. The ODW approved plan and schedule for correcting the significant deficiency including interim measures, progress to date, and which of the interim measures have been completed.

4. For noncommunity groundwater systems with a large proportion of non-English speaking consumers, the notice shall contain information in the appropriate language or languages regarding the importance of the notice or contain a telephone number or address where the consumers may contact the owner to obtain a translated copy of the notice or assistance with the appropriate language.

5. If directed by the ODW, the owner of a noncommunity groundwater system with significant deficiencies that have been corrected shall inform the consumers of the significant deficiencies, how the deficiencies were corrected, and the date or dates of correction.

~~K.~~ L. The district engineer may give notice to the public required by this section on behalf of the owner if the district engineer complies with the requirements of this section. However, the owner remains legally responsible for ensuring that the requirements of this section are met.

~~L.~~ M. Within 10 days of completion of each initial and repeat public notice, the owner shall provide the district engineer:

1. A certification that he has fully complied with the public notice requirements; and

2. A representative copy of each type of notice distributed, published, posted and made available to the persons served by the waterworks and to the media.

~~M.~~ N. The owner shall maintain copies of each public notice and certification for at least three years after issuance.

12VAC5-590-545. Consumer confidence reports.

A. Purpose and applicability.

1. Each community waterworks owner shall deliver to his customers an annual report that contains information on the quality of the water delivered by the waterworks and characterizes the risks, if any, from exposure to contaminants detected in the drinking water.

2. For the purpose of this section, customers are defined as billing units or service connections to which water is delivered by a community waterworks.

3. For the purpose of this section, a contaminant is detected when the laboratory reports the contaminant level as a measured level and not as nondetected (ND) or less than (<) a certain level. The owner shall utilize a laboratory that complies with 12VAC5-590-340, and the laboratory's analytical and reporting procedures shall have been in accordance with 12VAC5-590-440; laboratory certification requirements of the Commonwealth of Virginia, Department of General Services, Division of Consolidated Laboratory Services; and consistent with current U. S. Environmental Protection Agency regulations found at 40 CFR Part 141.

B. Effective dates.

1. Each existing community waterworks owner shall deliver his report by July 1 annually.

2. The owner of a new community waterworks shall deliver his first report by July 1 of the year after its first full calendar year in operation and annually thereafter.

3. The owner of a community waterworks that sells water to a consecutive waterworks shall deliver the applicable information necessary to comply with the requirements contained in this section to the consecutive waterworks by April 1 annually, or on a date mutually agreed upon by the seller and the purchaser and specifically included in a contract between the parties.

C. Content.

1. Each community waterworks owner shall provide his customers an annual report that contains the information on the source of the water delivered as follows:

a. Each report shall identify the source or sources of the water delivered by the community waterworks by providing information on:

(1) The type of the water (e.g., surface water, ground water); and

(2) The commonly used name, if any, and location of the body or bodies of water.

b. Where a source water assessment has been completed, the report shall:

(1) Notify consumers of the availability of the assessment;

(2) Describe the means to obtain the assessment; and

(3) Include a brief summary of the waterworks' susceptibility to potential sources of contamination.

c. The owner should highlight in the report significant sources of contamination in the source water area if such information is readily available.

2. For the purpose of compliance with this section, each report shall include the following definitions:

a. "Maximum contaminant level goal" or "MCLG" means the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

b. "Maximum contaminant level" or "MCL" means the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

c. A report for a community ~~water system~~ waterworks operating under a variance or an exemption issued by the commissioner under 12VAC5-590-140 and 12VAC5-590-150 shall include the following definition: "Variances and exemptions" means state or EPA permission not to meet an MCL or a treatment technique under certain conditions.

d. A report that contains data on contaminants that EPA regulates using any of the following terms shall include the applicable definitions:

(1) "Treatment technique" means a required process intended to reduce the level of a contaminant in drinking water.

(2) "Action level" means the concentration of a contaminant that, if exceeded, triggers treatment or other requirements that an owner shall follow.

(3) "Maximum residual disinfectant level goal" or "MRDLG" means the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

(4) "Maximum residual disinfectant level" or "MRDL" means the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

3. Information on detected contaminants.

a. This section specifies the requirements for information to be included in each report for the following contaminants:

(1) Contaminants subject to a PMCL, action level, maximum residual disinfectant level, or treatment technique as specified in 12VAC5-590-370;

(2) Unregulated contaminants subject to monitoring as specified in 12VAC5-590-370; and

(3) Disinfection byproducts or microbial contaminants, except Cryptosporidium, for which monitoring is required by Information Collection Rule (40 CFR 141.142 and 141.143 (7-1-97 Edition)), except as provided under subdivision 5 a of this subsection, and which are detected in the finished water.

b. The data relating to these contaminants shall be displayed in one table or in several adjacent tables. Any additional monitoring results that a community waterworks owner chooses to include in the report shall be displayed separately.

c. The data shall be derived from data collected to comply with EPA and state monitoring and analytical requirements during the calendar year preceding the year the report is due, except that:

(1) Where an owner is allowed to monitor for contaminants specified in subdivision 3 a (1) and (3) of this subsection less often than once a year, the table or tables shall include the date and results of the most recent sampling, and the report shall include a brief statement indicating that the data presented in the report are from the most recent testing done in accordance with the regulations. No data older than five years need be included.

(2) Results of monitoring in compliance with the Information Collection Rule (40 CFR 141.142 and 141.143 (7-1-97 Edition)) need only be included for five years from the date of last sample or until any of the detected contaminants becomes regulated and subject to routine monitoring requirements, whichever comes first.

d. For detected contaminants subject to a PMCL, action level, or treatment technique as specified in 12VAC5-590-370 and listed in Tables 2.1, 2.2 (Primary Maximum Contaminant Levels only), 2.3, 2.4 (Primary Maximum Contaminant Levels only), and 2.5, the table or tables shall contain:

(1) The PMCL for that contaminant expressed as a number equal to or greater than 1.0 as provided in Appendix O, with an exception for beta/photon emitters. When the detected level of beta/photon emitters has been reported in the units of pCi/L and does not exceed 50 pCi/L, the report may list the PMCL as 50 pCi/L. In this case, the owner shall include in the report the following footnote: The PMCL for beta particles is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for beta particles;

(2) The MCLG for that contaminant expressed in the same units as the PMCL as provided in Appendix O;

(3) If there is no PMCL for a detected contaminant, the table shall indicate that there is a treatment technique, or specify the action level, applicable to that contaminant, and the report shall include the definitions for treatment technique and/or action level, as appropriate, specified in subdivision 3 d of this subsection;

(4) For contaminants subject to a PMCL, except turbidity and total coliforms, the highest contaminant level used to

determine compliance and the range of detected levels is as follows:

(a) When compliance with the PMCL is determined annually or less frequently, the highest detected level at any sampling point and the range of detected levels expressed in the same units as the PMCL.

(b) When compliance with the PMCL is determined by calculating a running annual average of all samples taken at a sampling point, the highest average of any of the sampling points and the range of all sampling points expressed in the same units as the PMCL. For the PMCLs for TTHM and HAA5, the owner shall include the highest locational running annual average and the range of individual sample results for all sampling points expressed in the same units as the PMCL. If more than one location exceeds the TTHM or HAA5 PMCL, the owner shall include the locational running annual averages for all locations that exceed the PMCL.

(c) When compliance with the PMCL is determined on a systemwide basis by calculating a running annual average of all samples at all sampling points, the average and range of detection expressed in the same units as the PMCL. The range of detection for TTHM and HAA5 shall include individual sample results for the IDSE conducted under 12VAC5-590-370 B 3 e (2) for the calendar year that the IDSE samples were taken.

(5) For turbidity, the highest single measurement and the lowest monthly percentage of samples meeting the turbidity limits specified in 12VAC5-590-420 for the filtration technology being used. The report should include an explanation of the reasons for measuring turbidity;

(6) For lead and copper, the 90th percentile value of the most recent round of sampling and the number of sampling sites exceeding the action level;

(7) For total coliform:

(a) The highest monthly number of positive samples for waterworks collecting fewer than 40 samples per month;

(b) The highest monthly percentage of positive samples for waterworks collecting at least 40 samples per month;

(8) For fecal coliform, the total number of positive samples;

(9) The likely source or sources of detected contaminants. Specific information regarding contaminants may be available in sanitary surveys and source water assessments, and should be used when available to the owner. If the owner lacks specific information on the likely source, the report shall include one or more of the typical sources for that contaminant listed in Appendix O that are most applicable to the system.

e. If a community waterworks owner distributes water to his customers from multiple hydraulically independent distribution systems that are fed by different raw water sources:

(1) The table shall contain a separate column for each service area and the report shall identify each separate distribution system; or

(2) The owner shall produce a separate report tailored to include data for each service area.

f. The table or tables shall clearly identify any data indicating violations of PMCLs, MRDLs, or treatment techniques and the report shall contain a clear and readily understandable explanation of the violation including:

(1) The length of the violation;

(2) The potential adverse health effects using the relevant language of Appendix O; and

(3) Actions taken by the waterworks owner to address the violation.

g. For detected unregulated contaminants subject to monitoring as specified in 12VAC5-590-370 and listed in Tables 2.6 and 2.7, for which monitoring is required, the table or tables shall contain the average and range at which the contaminant was detected. The report may include a brief explanation of the reasons for monitoring for unregulated contaminants.

4. Information on Cryptosporidium, radon, and other contaminants:

a. If the owner has performed any monitoring for Cryptosporidium, including monitoring performed to satisfy the requirements of the Informational Collection Rule (40 CFR 141.143 (7-1-97 Edition)), which indicates that Cryptosporidium may be present in the source water or the finished water, the report shall include:

(1) A summary of the results of the monitoring; and

(2) An explanation of the significance of the results.

b. If the owner has performed any monitoring for radon which indicates that radon may be present in the finished water, the report shall include:

(1) The results of the monitoring; and

(2) An explanation of the significance of the results.

c. If the owner has performed additional monitoring that indicates the presence of other contaminants in the finished water, the report should include any results that may indicate a health concern, as determined by the commissioner. Detections above a proposed MCL or

health advisory level may indicate possible health concerns. For such contaminants, the report should include:

(1) The results of the monitoring; and

(2) An explanation of the significance of the results noting the existence of a health advisory or a proposed regulation.

5. Compliance with other regulations.

a. In addition to the requirements of subdivision 3 f of this subsection the report shall note any violation that occurred during the year covered by the report of a requirement listed below.

(1) Monitoring and reporting of compliance data;

(2) Filtration and disinfection prescribed by 12VAC5-590-420. For owners who have failed to install adequate filtration or disinfection equipment or processes, or have had a failure of such equipment or processes which constitutes a violation, the report shall include the following language as part of the explanation of potential adverse health effects: Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches;

(3) Lead and copper control requirements prescribed by 12VAC5-590-370. For owners who fail to take one or more of the prescribed actions, the report shall include the applicable language of Appendix O for lead, copper, or both;

(4) Treatment techniques for Acrylamide and Epichlorohydrin prescribed by 12VAC5-590-420 G. For owners who violate the requirements of that section, the report shall include the relevant language from Appendix O;

(5) Recordkeeping of compliance data;

(6) Special monitoring requirements for unregulated contaminants prescribed by 12VAC5-590-370 B 4 and for sodium;

(7) Violation of the terms of a variance, an exemption, or an administrative or judicial order.

b. The report shall contain:

(1) A clear and readily understandable explanation of the violation;

(2) Any potential adverse health effects; and

(3) The steps the owner has taken to correct the violation.

c. For community groundwater systems, the following shall be included:

(1) A significant deficiency that is uncorrected at the time of the report; or

(2) An E. coli positive groundwater source sample that is not invalidated at the time of the report.

d. The owner of a community groundwater system shall report annually the information in subdivision 5 c of this subsection until the ODW determines that the significant deficiency or the E. coli positive source water sample has been satisfactorily addressed. The report shall include the following information:

(1) The nature of the significant deficiency or the source of the E. coli contamination and the date the significant deficiency was identified by the ODW or the date or dates of the E. coli positive source samples.

(2) If the E. coli contamination has been addressed in accordance with 12VAC5-590-421 and the date of such action.

(3) The ODW approved plan and schedule for correcting the significant deficiency or E. coli contamination including interim measures, progress to date, and which interim measures have been completed.

(4) In communities with a large portion of non-English speaking consumers, the notice shall contain information in the appropriate language or languages regarding the importance of the notice or contain a telephone number or address where the consumers may contact the owner to obtain a translated copy of the notice or assistance with the appropriate language.

(5) For E. coli contamination, the potential health effects language shall be included.

e. If directed by the ODW, the owner of a community groundwater system with significant deficiencies that have been corrected at the time of the report shall inform his consumers of the significant deficiencies, how the deficiencies were corrected, and the date or dates of correction under subdivisions 5 d (1) through (4) of this subsection.

6. Variances and exemptions. If a system is operating under the terms of a variance or an exemption issued by the commissioner under 12VAC5-590-140 and 12VAC5-590-150, the report shall contain:

a. An explanation of the reasons for the variance or exemption;

b. The date on which the variance or exemption was issued;

c. A brief status report on the steps the owner is taking to install treatment, find alternative sources of water, or otherwise comply with the terms and schedules of the variance or exemption; and

d. A notice of any opportunity for public input in the review or renewal of the variance or exemption.

7. Additional information.

a. The report shall contain a brief explanation regarding contaminants, which may reasonably be expected to be found in drinking water including bottled water. This explanation shall include the exact language of subdivisions 8 a (1), (2) and (3) of this subsection or the owner shall use his own comparable language following approval by the commissioner. The report also shall include the exact language of subdivision 8 a (4) of this subsection.

(1) The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

(2) Contaminants that may be present in source water include: (i) microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; (ii) inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; (iii) pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; (iv) organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; (v) radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

(3) In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

(4) Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

b. The report shall include the telephone number of the owner, operator, or designee of the community waterworks as a source of additional information concerning the report.

c. In communities with a large proportion of non-English speaking residents, as determined by the commissioner, the report shall contain information in the appropriate language or languages regarding the importance of the report or contain a telephone number or address where such residents may contact the system to obtain a translated copy of the report or assistance in the appropriate language.

d. The report shall include the following information about opportunities for public participation in decisions that may affect the quality of the water. The waterworks owner should consider including the following additional relevant information:

(1) The time and place of regularly scheduled board meetings of the governing body which has authority over the waterworks.

(2) If regularly scheduled board meetings are not held, the name and telephone number of a waterworks representative who has operational or managerial authority over the waterworks.

e. The owner may include such additional information as he deems necessary for public education consistent with, and not detracting from, the purpose of the report.

D. Additional health information.

1. All reports shall prominently display the following language: Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer who are undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

2. Any waterworks owner who detects arsenic at levels above 0.005 mg/L, but equal to or below the PMCL of 0.010 mg/L, shall include in his report the following informational statement about arsenic: While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of

arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

In lieu of the statement required in this subdivision, the waterworks owner may include his own educational statement after receiving approval from the commissioner.

3. A waterworks owner who detects arsenic levels above 0.010 mg/L shall include the health effects language contained in Appendix O.

4. An owner who detects nitrate at levels above 5 mg/L, but below the PMCL, shall include in his report the following informational statement about the impacts of nitrate on children: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

In lieu of the statement required in this subdivision, the waterworks owner may include his own educational statement after receiving approval from the commissioner.

5. All reports shall prominently display the following language: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. [NAME OF UTILITY] is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800-426-4791).

In lieu of the statement required in this subdivision, the owner may include his own educational statement after receiving approval from the commissioner.

6. Community waterworks owners who detect TTHM above 0.080 mg/L, but below the PMCL, as an annual average shall include health effects language prescribed by paragraph ~~73~~ 81 of Appendix O.

E. Report delivery and recordkeeping.

1. Each community waterworks owner shall mail or otherwise directly deliver one copy of the report to each customer.

2. The owner shall make a good faith effort that shall be tailored to the consumers who are served by the system but are not bill paying customers, such as renters and workers. This good faith effort shall include at least one, and preferably two or more, of the following methods appropriate to the particular waterworks:

a. Posting the reports on the Internet;

b. Mailing to postal patrons in metropolitan areas;

c. Advertising the availability of the report in the news media;

d. Publication in a local newspaper;

e. Posting in public places such as libraries, community centers, and public buildings;

f. Delivery of multiple copies for distribution by single-biller customers such as apartment buildings or large private employers;

g. Delivery to community organizations.

h. Other methods as approved by the commissioner.

3. No later than July 1 of each year the owner shall deliver a copy of the report to the district engineer, followed within three months by a certification that the report has been distributed to customers and that the information in the report is correct and consistent with the compliance monitoring data previously submitted to the commissioner.

4. No later than July 1 of each year the owner shall deliver the report to any other agency or clearinghouse specified by the commissioner.

5. Each community waterworks owner shall make the report available to the public upon request.

6. The owner of each community waterworks serving 100,000 or more persons shall post the current year's report to a publicly accessible site on the Internet.

7. Each community waterworks owner shall retain copies of the report for no less than three years.

12VAC5-590-550. Recordkeeping.

All owners shall retain at their waterworks or at a convenient location near their waterworks the following records for the minimum time periods specified:

A. Records of microbiological analyses and turbidity analyses -- Five years.

B. Chemical Analyses -- 10 years.

C. Individual filter monitoring required under 12VAC5-590-530 C 1 b (2) -- Three years.

D. Results of Disinfection Profile including raw data and analysis -- Indefinitely.

E. Disinfection Benchmarking including raw data and analysis -- Indefinitely.

F. The following information shall be provided for subsections A and B of this section:

1. Date, place, and time of sampling as well as the name of the person who collected the sample;

2. Identification of sample (e.g., routine, check sample, raw water, other);

3. Date of analysis;

4. Laboratory and/or person responsible for performing analysis;

5. Analytical method/technique used; and

6. Results of the analysis.

G. Original records of all sampling data and analyses, reports, surveys, letters, evaluations, schedules, commissioner determinations, and any other information required by 12VAC5-590-405 A 1 and 2, B, C, and D; and 12VAC5-590-375 B, C, and D pertaining to lead and copper. Each waterworks owner shall retain the records required by this section for no fewer than 12 years.

H. Owners shall keep results from the initial round of source water monitoring under 12VAC5-590-420 B 3 a (1) and the second round of source water monitoring under 12VAC5-590-420 B 3 a (2) until three years after bin classification under 12VAC5-590-420 B 3 c (1) for the particular round of monitoring.

I. Owners shall keep any notification to the commissioner that they will not conduct source water monitoring due to meeting the criteria of 12VAC5-590-420 B 3 a (4) for three years.

J. Owners shall keep the results of treatment monitoring associated with microbial toolbox options under 12VAC5-590-420 B 3 d (3) through (7) and with uncovered finished water reservoirs under 12VAC5-590-420 L, as applicable, for three years.

K. Action taken to correct violations of these regulations -- three years after last action with respect to violation involved.

L. Copies of reports, summaries, or communications relating to any sanitary surveys performed -- 10 years following inspection.

M. Variance or exemptions granted (and records related thereto) -- five years following expiration of variance or exemption.

N. Cross connection control program records -- 10 years.

O. Owners of waterworks that recycle flow, as stipulated in 12VAC5-590-420 K, shall collect and retain on file recycle flow information for review and evaluation by the district engineer beginning June 8, 2004. Information shall include, as a minimum:

1. Copy of the recycle notification submitted to the district engineer under 12VAC5-590-530 I.

2. List of all recycle flows and the frequency with which they are returned.

3. Average and maximum backwash flow rate through the filters and the average and maximum duration of the filter backwash process, in minutes.

4. Typical filter run length and a written summary of how the filter run length is determined.

5. The type of treatment provided for the recycle flow.

6. Data on the physical dimensions of the equalization and/or treatment units, typical and maximum hydraulic loading rates, type of treatment chemicals used, average dose, frequency of use, and frequency at which solids are removed, if applicable.

P. Copies of monitoring plans developed pursuant to these regulations shall be kept for the same period of time as the records of analyses taken under the plan are required to be kept under paragraph A or B of this section, except as specified elsewhere in these regulations.

Q. All owners shall retain the following additional records:

1. Plant operational records.

2. Water well completion reports.

3. As-built engineering plans and specifications of facilities.

4. Shop drawings of major equipment.

5. Records of equipment repair or replacement.

6. Updated map of water distribution system.

7. All accident reports.

R. Additional recordkeeping requirements for groundwater systems.

1. Records of corrective actions – 10 years.

2. Records of public notification as required by 12VAC5-590-540 – Three years.

3. Records of invalidation of groundwater source samples – Five years.

4. For consecutive waterworks, records of notification to the wholesale waterworks of coliform positive samples – Five years.

5. For waterworks required to conduct compliance monitoring:

a. Records of the ODW specified minimum disinfectant residual – 10 years.

b. Records of the lowest daily residual disinfectant concentration – Five years.

c. Records of the dates and duration of any failure to maintain the ODW specified minimum residual disinfectant concentration for a period of more than four hours – Five years.

d. Records of any ODW specified compliance parameters for alternative treatment and records of the date and duration of any failure to meet the alternative treatment operating requirements for more than four hours – Five years.

APPENDIX O.
REGULATED CONTAMINANTS FOR CONSUMER CONFIDENCE REPORTS AND PUBLIC NOTIFICATION

Key

AL = Action Level
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
MFL = million fibers per liter
mrem/year = milirems per year (a measure of radiation absorbed by the body)
MRDL = Maximum Residual Disinfectant Level
MRDLG = Maximum Residual Disinfectant Level Goal
NTU = Nephelometric Turbidity Units
pCi/l = picocuries per liter (a measure of radioactivity)
ppb = parts per billion, or micrograms per liter (µg/L)
ppm = parts per million, or milligrams per liter (mg/L)
ppq = parts per quadrillion, or picograms per liter
ppt = parts per trillion, or nanograms per liter
TT = Treatment Technique

Contaminant (units)	Traditional MCL in mg/l	To convert for CCR, multiply by	MCL in CCR units	MCLG	Major Sources in Drinking Water	Health Effects Language
Microbiological Contaminants						
(1) Total ~~Coliform Bacteria~~ coliform bacteria	MCL: ~~(systems that collect 40 or more samples per month)~~ (waterworks that collect 40 or more samples per month) 5% of monthly samples are positive; ~~(systems that collect fewer than 40 samples per month)~~ (waterworks that collect fewer than 40 samples per month)[1] positive monthly sample			0	Naturally present in the environment	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems
(2) Fecal coliform and E. coli	MCL: a routine sample and a repeat sample are total coliform positive, and one is also fecal coliform of E. coli positive			0	Human and animal fecal waste	Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young

						children, some of the elderly, and people with severely-compromised immune systems.
(3) Source water fecal ~~indicators (E. coli, enterococci, coliphage)~~ indicator (E. coli)	TT		TT	0 for E. coli~~, none for entero-cocci and coli-phage~~	Human and animal fecal waste	Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune system.
(4) Groundwater rule TT violations other than (3) above[1]	TT			TT		Inadequately treated or inadequately protected water may contain disease-causing organisms. These organisms can cause symptoms such as diarrhea, nausea, cramps, and associated headaches.
(5) Turbidity	TT	-	TT	n/a	Soil runoff	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.
(6) Giardia lamblia, viruses, Hetrotrophic plate count, Legionella, Cryptosporidium[1]	TT[53]	-	n/a	0	n/a	Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Radioactive Contaminants						
(7) Beta/photon emitters (mrem/yr)	4 mrem/yr	-	4	0	Decay of natural and man-made deposits	Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.
(8) Alpha emitters (pCi/L)	15 pCi/L	-	15	0	Erosion of natural deposits	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
(9) Combined radium (pCi/L)	5 pCi/L	-	5	0	Erosion of natural deposits	Some people who drink water containing radium-226 or radium-228 in excess of the MCL over many years may have an increased risk of getting cancer.
(10) Uranium (ppb)	30 µg/L	-	30	0	Erosion of natural deposits	Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.
Inorganic Contaminants						
(11) Antimony (ppb)	0.006	1000	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder	Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.

(12) Arsenic (ppb)	0.010[2]	1000	10.[2]	0[2]	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
(13) Asbestos (MFL)	7 MFL	-	7	7	Decay of asbestos cement water mains; Erosion of natural deposits	Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.
(14) Barium (ppm)	2	-	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
(15) Beryllium (ppb)	0.004	1000	4	4	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries	Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.
(16) Cadmium (ppb)	0.005	1000	5	5	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Run-off from waste batteries and paints	Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.
(17) Chromium (ppb)	0.1	1000	100	100	Discharge from steel and pulp mills; Erosion of natural deposits	Some people who drink water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.
(18) Copper (ppm)	AL=1.3	-	AL=1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience

						gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
(19) Cyanide (ppb)	0.2	1000	200	200	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories	Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.
(20) Fluoride (ppm)	4	-	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
(21) Lead (ppb)	AL=0.015	1000	AL=15	0	Corrosion of household plumbing systems; Erosion of natural deposits	Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.
(22) Mercury [inorganic] (ppb)	.002	1000	2	2	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills;	Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney

					Runoff from cropland	damage.
(23) Nitrate (ppm)	10	-	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
(24) Nitrite (ppm)	1	-	1	1	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
(25) Total Nitrate and Nitrite	10	-	n/a	10	n/a	Infants below the age of six months who drink water containing nitrate and nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
(26) Selenium (ppb)	0.05	1000	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines	Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.
(27) Thallium (ppb)	0.002	1000	2	0.5	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories	Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.
Synthetic Organic Contaminants including Pesticides and Herbicides						
(28) 2,4-D (ppb)	0.07	1000	70	70	Runoff from herbicides used on row crops	Some people who drink water containing the weed killer 2,4-D well in excess

						of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.
(29) 2,4,5-TP [Silvex] (ppb)	0.05	1000	50	50	Residue of banned herbicide	Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.
(30) Acrylamide	TT	-	TT	0	Added to water during sewage/wastewater treatment	Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood, and may have an increased risk of getting cancer.
(31) Alachlor (ppb)	0.002	1000	2	0	Runoff from herbicide used on row crops	Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.
(32) Atrazine (ppb)	0.003	1000	3	3	Runoff from herbicide used on row crops	Some people who drink water containing the atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.
(33) Benzo(a)pyrene[PAH]	0.0002	1,000,000	200	0	Leaching from linings of water storage tanks and distribution lines	Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.
(34) Carbofuran (ppb)	0.04	1000	40	40	Leaching of soil fumigant used on rice and alfalfa	Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or

						reproductive systems.
(35) Chlordane (ppb)	0.002	1000	2	0	Residue of banned termiticide	Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver or nervous system, and may have an increased risk of getting cancer.
(36) Dalapon (ppb)	0.2	1000	200	200	Runoff from herbicide used on rights of way	Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.
(37) Di(2-ethylhexyl) adipate (ppb)	0.4	1000	400	400	Discharge from chemical factories	Some people who drink water containing di(2-ethyhexyl)adipate well in excess of the MCL over many years could experience toxic effects, such as weight loss, liver enlargement or possible reproductive difficulties.
(38) Di(2-ethylhexyl)phthalate (ppb)	0.006	1000	6	0	Discharge from rubber and chemical factories	Some people who drink water containing di(2-ethylhexyl)phthalate in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.
(39) Dibromochloropropane (ppt)	0.0002	1,000,000	200	0	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards	Some people who drink water containing DBCP well in excess of the MCL over many years could experience reproductive problems and may have an increased risk of getting cancer.
(40) Dinoseb (ppb)	0.007	1000	7	7	Runoff from herbicide used on soybeans and vegetables	Some people who drink water containing dinoseb well in excess of the MCL over many years could experience reproductive difficulties.
(41) Diquat (ppb)	0.02	1000	20	20	Runoff from herbicide use	Some people who drink water containing diquat in excess of the MCL over

						many years could get cataracts.
(42) Dioxin [2,3,7,8-TCDD] (ppq)	0.00000003	1,000,000,000	30	0	Emissions from waste incineration and other combustion; Discharge from chemical factories	Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.
(43) Endothall (ppb)	0.1	1000	100	100	Runoff from herbicide use	Some people who drink water containing endothall in excess of the MCL over many years could experience problems with their stomach or intestines.
(44) Endrin (ppb)	0.002	1000	2	2	Runoff of banned insecticide	Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.
(45) Epichlorohydrin	TT	-	TT	0	Discharge from industrial chemical factories; An impurity of some water treatment chemicals	Some people who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach problems, and may have an increased risk of getting cancer.
(46) Ethylene dibromide (ppt)	0.00005	1,000,000	50	0	Discharge from petroleum refineries	Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.
(47) Glyphosate (ppb)	0.7	1000	700	700	Runoff from herbicide use	Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or reproductive difficulties.
(48) Heptachlor (ppt)	0.0004	1,000,000	400	0	Residue of banned pesticide	Some people who drink water containing heptachlor in excess of the MCL over many years could experience liver

						damage and may have an increased risk of getting cancer.
(49) Heptachlor epoxide (ppt)	0.0002	1,000,000	200	0	Breakdown of heptachlor	Some people who drink water containing heptachlor epoxide in excess of the MCL over many years could experience liver damage, and may have an increased risk of getting cancer.
(50) Hexachlorobenzene (ppb)	0.001	1000	1	0	Discharge from metal refineries and agricultural chemical factories	Some people who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys or adverse reproductive effects, and may have an increased risk of getting cancer.
(51) Hexachlorocyclopentadiene (ppb)	0.05	1000	50	50	Discharge from chemical factories	Some people who drink water containing hexachlorocyclopentadiene well in excess of the MCL over many years could experience problems with their stomach or kidneys.
(52) Lindane (ppt)	0.0002	1,000,000	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens	Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.
(53) Methoxychlor (ppb)	0.04	1000	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock	Some people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.
(54) Oxamyl [Vydate] (ppb)	0.2	1000	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes	Some people who drink water containing ethylene oxamyl in excess of the MCL over many years could experience slight nervous system effects.
(55) PCBs [Polychlorinated biphenyls] (ppt)	0.0005	1,000,000	500	0	Runoff from landfills; Discharge of waste chemicals	Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in

						their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.
(56) Pentachlorophenol (ppb)	0.001	1000	1	0	Discharge from wood preserving factories	Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.
(57) Picloram (ppb)	0.5	1000	500	500	Herbicide runoff	Some people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.
(58) Simazine (ppb)	0.004	1000	4	4	Herbicide runoff	Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.
(59) Toxaphene (ppb)	0.003	1000	3	0	Runoff/leaching from insecticide used on cotton and cattle	Some people who drink water containing toxaphene in excess of the MCL over many years could experience problems with their thyroid, kidneys, or liver and may have an increased risk of getting cancer.
Volatile Organic Contaminants						
(60) Benzene (ppb)	0.005	1000	5	0	Discharge from factories; Leaching from gas storage tanks and landfills	Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.
(61) Carbon tetrachloride (ppb)	0.005	1000	5	0	Discharge from chemical plants and other industrial activities	Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver

						and may have an increased risk of getting cancer.
(62) Chlorobenzene (ppb)	0.1	1000	100	100	Discharge from chemical and agricultural chemical factories	Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.
(63) o-Dichlorobenzene (ppb)	0.6	1000	600	600	Discharge from industrial chemical factories	Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or spleen, or changes in their blood.
(64) p-Dichlorobenzene (ppb)	0.075	1000	75	75	Discharge from industrial chemical factories	Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or circulatory systems.
(65) 1,2-Dichloroethane (ppb)	0.005	1000	5	0	Discharge from industrial chemical factories	Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.
(66) 1,1-Dichloroethylene (ppb)	0.007	1000	7	7	Discharge from industrial chemical factories	Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
(67) cis-1,2-Dichloroethylene (ppb)	0.07	1000	70	70	Discharge from industrial chemical factories	Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
(68) trans-1,2-Dichloroethylene (ppb)	0.1	1000	100	100	Discharge from industrial chemical factories	Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with

						their liver.
(69) Dichloromethane (ppb)	0.005	1000	5	0	Discharge from pharmaceutical and chemical factories	Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.
(70) 1,2-Dichloropropane (ppb)	0.005	1000	5	0	Discharge from industrial chemical factories	Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.
(71) Ethylbenzene (ppb)	0.7	1000	700	700	Discharge from petroleum refineries	Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.
(72) Styrene (ppb)	0.1	1000	100	100	Discharge from rubber and plastic factories; Leaching from landfills	Some people who drink water containing styrene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory system.
(73) Tetrachloroethylene (ppb)	0.005	1000	5	0	Discharge from factories and dry cleaners	Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.
(74) 1,2,4-Trichlorobenzene (ppb)	0.07	1000	70	70	Discharge from textile-finishing factories	Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.
(75) 1,1,1,-Trichloroethane (ppb)	0.2	1000	200	200	Discharge from metal degreasing sites and other factories	Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or

						circulatory system.
(76) 1,1,2-Trichloroethane (ppb)	0.005	1000	5	3	Discharge from industrial chemical factories	Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.
(77) Trichloroethylene (ppb)	0.005	1000	5	0	Discharge from metal degreasing sites and other factories	Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
(78) Toluene (ppm)	1	-	1	1	Discharge from petroleum factories	Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.
(79) Vinyl Chloride (ppb)	0.002	1000	2	0	Leaching from PVC piping; Discharge from plastic factories	Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.
(80) Xylenes (ppm)	10	-	10	10	Discharge from petroleum factories; Discharge from chemical factories	Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.
Disinfection By-Products, Precursors, and Residuals						
(81) TTHMs [total trihalomethanes] (ppb)	0.080	1000	80	n/a	By-product of drinking water disinfection	Some people who drink water containing trihalomethanes in excess of the MCL over many years could experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
(82) Haloacetic acids (HAA) (ppb)	0.060	1000	60	n/a	By-product of drinking water disinfection	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an

						increased risk of getting cancer.
(83) Bromate (ppb)	0.010	1000	10	0	By-product of drinking water disinfection	Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer.
(84) Chloramines (ppm)	MRDL=4.0	-	MRDL=4.0	MRDLG=4	Water additive used to control microbes	Some people who use water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort or anemia.
(85) Chlorine ~~(ppb)~~ (ppm)	MRDL=4.0	-	MRDL=4.0	MRDLG=4	Water additive used to control microbes	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
(86) Chlorine dioxide (ppb)[42]	MRDL=0.8	1000	MRDL=800	MRDLG=800	Water additive used to control microbes	Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.
(86a) Chlorine dioxide, where any two consecutive daily samples taken at the entrance to the distribution system are above the MRDL.[1]	MRDL=0.8			MRDLG=0.8		The chlorine dioxide violations reported today are the result of exceedances at the treatment facility only, not within the distribution system which delivers water to consumers. Continued compliance with chlorine dioxide levels within the

						distribution system minimizes the potential risk of these violations to consumers.
(86b) Chlorine dioxide, where one or more distribution system samples are above the MRDL.[1]	MRDL=0.8			MRDLG=0.8		The chlorine dioxide violations reported today include exceedances of the EPA standard within the distribution system which delivers water to consumers. Violations of the chlorine dioxide standard within the distribution system may harm human health based on short-term exposures. Certain groups, including fetuses, infants, and young children, may be especially susceptible to nervous system effects from excessive chlorine dioxide exposure.
(87) Chlorite (ppm)	1.0	-	1.0	0.8	By-product of drinking water disinfection	Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.
(88) Total organic carbon (ppm)	TT	-	TT	n/a	Naturally present in the environment	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous systems effects, and may lead to an increased risk of getting cancer.

[1]This information is for public notification purposes only.

~~[2]These arsenic values are effective January 23, 2006. Until then, the MCL is 0.05 mg/l and there is no MCLG.~~

[~~3~~2]This information is for Consumer Confidence Report purposes only.

[~~4~~3]Violations of the treatment technique requirements for filtration and disinfection that involve turbidity exceedances may use the health effects language for turbidity instead.

DOCUMENTS INCORPORATED BY REFERENCE (12VAC5-590)

~~Methods for the Determination of Metals in Environmental Samples, June 1991, United States Environmental Protection Agency.~~

~~Methods for the Determination of Metals in Environmental Samples — Supplement I, May 1994, United States Environmental Protection Agency.~~

~~Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993, United States Environmental Protection Agency.~~

~~Methods for the Determination of Organic Compounds in Drinking Water, July 1991, United States Environmental Protection Agency.~~

~~Methods for the Determination of Organic Compounds in Drinking Water — Supplement I, July 1990, United States Environmental Protection Agency.~~

~~Methods for the Determination of Organic Compounds in Drinking Water — Supplement II, August 1992, United States Environmental Protection Agency.~~

~~Technical Notes on Drinking Water Methods, October 1994, United States Environmental Protection Agency.~~

"Maximum Permissible Body Burdens and Maximum Permissible Concentration of Radionuclides in Air or Water for Occupational Exposure," National Bureau of Standards Handbook 69.

Standard Methods for the Examination of Water and Wastewater, 18th edition, American Public Health Association, American Waterworks Association, and Water Pollution Control Federation, 1992.

~~Methods for the Determination of Metals in Environmental Samples (including supplement I), USEPA May 1994.~~

~~Methods for the Determination of Organic Compounds in Drinking Water (including supplement I and II), USEPA, October 1994.~~

~~Technical Notes on Drinking Water Methods, USEPA, October 1994.~~

ANSI/NSF Standard for Drinking Water Treatment System Components, ANSI/NSF 61, American National Standard Institute, November, 1994.

AWWA Standard for American National Standard for Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water, C-104, American Waterworks Association.

AWWA Standard for American National Standard for Polyethylene Encasement for Ductile-Iron Pipe and Fittings for Water, C-105, American Waterworks Association.

AWWA Standard for American National Standard for Ductile-Iron and Gray-Iron Fittings 3 Inch Through 48 Inch for Water, C-110, American Waterworks Association.

AWWA Standard for American National Standard for Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings, C-111, American Waterworks Association.

AWWA Standard for American National Standard for Flanged Ductile-Iron Pipe with Threaded Flanges, C-115, American Waterworks Association.

AWWA Standard for American National Standard for the Thickness Design of Ductile-Iron Pipe, C-150, American Waterworks Association.

AWWA Standard for American National Standard for Ductile-Iron Pipe, Centrifugally Cast, for Water or Other Liquids, C-151, American Waterworks Association.

AWWA Standard for American National Standard for Ductile-Iron Pipe, Compact Fittings, 3 Inch Through 16 Inch, for Water and Other Liquids, C-153, American Waterworks Association.

AWWA Standard for Steel Water Pipe, 6 Inch and Larger, C-200, American Waterworks Association.

AWWA Standard for Coal-Tar Protective Coatings and Linings for Steel Water Pipelines- Enamel and Tape-Hot Applied, C-203, American Waterworks Association.

AWWA Standard for Cement-Mortar Protective Lining and Coating for Steel Water Pipe-4 Inch and Larger-Shop Applied, C-205, American Waterworks Association.

AWWA Standard for Field Welding of Steel Water Pipe, C-206, American Waterworks Association.

AWWA Standard for Steel Pipe Flanges for Waterworks Service-4 Inch and Larger-Shop Applied, C-207, American Waterworks Association.

AWWA Standard for Dimensions for Fabricated Steel Water Pipe Fittings, C-208, American Waterworks Association.

AWWA Standards for Cold-Applied Coatings for the Exterior of Special Sections, Connections, and Fittings for Steel Water Pipelines, C-209, American Waterworks Association.

AWWA Standard for Liquid-Epoxy Coating Systems for the Interior and Exterior of Steel Water Pipelines, C-210, American Waterworks Association.

AWWA Standard for Fusion-Bonded Epoxy Coating for the Interior and Exterior of Steel Water Pipelines, C-213, American Waterworks Association.

AWWA Standards for Tape Coating Systems for the Exterior of Steel Water Pipelines, C-214, American Waterworks Association.

AWWA Standard for Extruded Polyolefin Coatings for the Exterior of Steel Water Pipelines, C-215, American Waterworks Association.

AWWA Standard for Cross-Linked Polyolefin Coatings for the Exterior of Special Sections, Connections, and Fittings for Buried Steel Water Pipelines, C-216, American Waterworks Association.

AWWA Standard for Cold-Applied Petrolatum Tape and Petroleum Wax Tape Coatings for the Exterior of Special Sections, Connections, and Fittings for Buried Steel Water Pipelines, C-217, American Waterworks Association.

AWWA Standard for Coating the Exterior of Aboveground Steel Water Pipelines and Fittings, C-218, American Waterworks Association.

AWWA Standard for Bolted, Sleeve-Type Couplings for Plain-End Pipe, C-219, American Waterworks Association.

AWWA Standard for Stainless Steel Pipe, 4 Inch and Larger, C-220, American Waterworks Association.

AWWA Standard for Reinforced Concrete Pressure Pipe, Steel-Cylinder Type, for Water and Other Liquids, C-300, American Waterworks Association.

AWWA Standard for Prestressed Concrete Pressure Pipe, Steel-Cylinder Type, for Water and Other Liquids, C-301, American Waterworks Association.

AWWA Standard for Reinforced Concrete Pressure Pipe, Noncylinder Type, for Water and Other Liquids, C-302, American Waterworks Association.

AWWA Standard for Reinforced Concrete Pressure Pipe, Noncylinder Type, Pretensioned, for Water and Other Liquids, C-303, American Waterworks Association.

AWWA Standard for Design of Prestressed Concrete Cylinder Pipe, C-304, American Waterworks Association.

AWWA Standard for the Selection of Asbestos-Cement Transmission and Feeder Main Pipe, C-403, American Waterworks Association.

AWWA Standard for Cement-Mortar Lining of Water Pipelines-4 Inch (1000 mm) and Larger-In Place, C-602, American Waterworks Association.

AWWA Standard for Underground Service Line Valves and Fittings, C-800, American Waterworks Association.

AWWA Standard for Polyvinyl Chloride Pressure Pipe, 4 Inch Through 12 Inch for Water Distribution, C-900, American Waterworks Association.

AWWA Standard for Polybutylene Pressure Pipe and Tubings, 1/2 Inch Through 3 Inch, for Water Service, C-902, American Waterworks Association.

AWWA Standard for Polyethylene Pressure Pipe and Fittings, 4 Inch Through 63 Inch, for Water Distribution, C-906, American Waterworks Association.

AWWA Standard for Polyethylene Pressure Pipe and Tubing, 1/2 Inch Through 3 Inch, for Water Service, C-901, American Waterworks Association.

AWWA Standard for Polyvinyl Chloride Water Transmission Pipe, Nominal Diameters 14 Inch Through 36 Inch, C-905, American Waterworks Association.

AWWA Standard for Polyvinyl Chloride Pressure Fittings, 4 Inch Through 8 Inch, C-907, American Waterworks Association.

AWWA Standard for Fiberglass Pressure Pipe, C-950. American Waterworks Association.

AWWA Standard for Asbestos-Cement Pressure Pipe, 4 Inch Through 16 Inch, for Water Distribution Systems, C-400, American Waterworks Association.

AWWA Standard for Selection of Asbestos-Cement Pressure Pipe, 4 Inch Through 16 Inch, for Water Distribution Systems, C-401, American Waterworks Association.

AWWA Standard for Asbestos-Cement Transmission Pipe, 18 Inch Through 42 Inch, for Potable Water and Other Liquids, C-402, American Waterworks Association.

AWWA Standard for Installation of Ductile-Iron Pipe and Their Appurtenances, C-600, American Waterworks Association.

AWWA Standard for Installation of Asbestos-Cement Pressure Pipe, C-603, American Waterworks Association.

AWWA Standard for Grooved and Shouldered Joints, C-606, American Waterworks Association.

AWWA Standard for Disinfecting Water Mains, C-651, American Waterworks Association.

Control of Communicable Diseases in Man, 15 edition, American Public Health Association, 1990.

VA.R. Doc. No. R12-1086; Filed October 14, 2011, 5:23 p.m.

Final Regulation

Title of Regulation: **12VAC5-613. Regulations for Alternative Onsite Sewage Systems (adding 12VAC5-613-10 through 12VAC5-613-210).**

Statutory Authority: §§ 32.1-12 and 32.1-164 of the Code of Virginia.

Effective Date: December 7, 2011.

Agency Contact: Allen Knapp, Director, Division of Onsite Sewage and Wastewater Services, Department of Health, 109 Governor Street, Richmond, VA 23219, telephone (804) 864-7470, or email allen.knapp@vdh.virginia.gov.

Summary:

This regulation creates an inspection, sampling, and reporting frequency for all alternative onsite sewage systems (AOSSs). The regulations (i) establish the performance requirements for AOSSs, as well as horizontal setbacks for those designed in accordance with § 32.1-163.6 of the Code of Virginia; (ii) establish nitrogen limitations for all large AOSSs and require all small AOSSs to reduce nutrient loads within the Chesapeake Bay Watershed; (iii) establish treatment levels for performance and provide a methodology for evaluating treatment unit efficacy; (iv) add a new section to allow professional engineers to waive certain performance and sampling location requirements; and (v) supplement the existing Sewage Handling and Disposal Regulations (12VAC5-610), which contain permitting and enforcement procedures and other requirements for onsite sewage systems, including AOSSs.

The proposed requirement that owners have a relationship with a licensed operator for the purpose of providing operation and maintenance to the AOSSs is deleted for consistency with § 32.1-164 of the Code of Virginia.

Summary of Public Comments and Agency's Response: A summary of comments made by the public and the agency's response may be obtained from the promulgating agency or viewed at the office of the Registrar of Regulations.

CHAPTER 613
REGULATIONS FOR ALTERNATIVE ONSITE SEWAGE SYSTEMS

Part I
General

12VAC5-613-10. Definitions.

The following words and terms used in this chapter shall have the following meanings. Terms not defined in this chapter shall have the meanings prescribed in Chapter 6 (§ 32.1-163 et seq.) of Title 32.1 of the Code of Virginia or in 12VAC5-610 unless the plain reading of the language requires a different meaning.

"Alternative onsite sewage system," "AOSS," or "alternative onsite system" means a treatment works that is not a conventional onsite sewage system and does not result in a point source discharge.

"Best management practice" means a conservation or pollution control practice approved by the division, such as wastewater treatment units, shallow effluent dispersal fields, saturated or unsaturated soil zones, or vegetated buffers, that manages nutrient losses or other potential pollutant sources to minimize pollution of water resources.

[~~"Biochemical oxygen demand" or "BOD" means the measure of the amount of oxygen required by bacteria for stabilizing material that can be decomposed under aerobic conditions.~~]

"Biochemical oxygen demand, five-day" or "BOD_5" means the quantitative measure of the amount of oxygen consumed by bacteria while stabilizing, digesting, or treating biodegradable organic matter under aerobic conditions over a five-day incubation period; BOD_5 is expressed in milligrams per liter (mg/l).

"Board" means the State Board of Health.

"Chesapeake Bay Watershed" means the following Virginia river basins: Potomac River Basin (see 9VAC25-260-390 and 9VAC25-260-400), James River Basin (see 9VAC25-260-410, 9VAC25-260-415, 9VAC25-260-420, and 9VAC25-260-430), Rappahannock River Basin (see 9VAC25-260-440), Chesapeake Bay and small coastal basins (see 9VAC25-260-520, Section 2 through Section 3g), and the York River Basin (see 9VAC25-260-530).

"Conventional onsite sewage system" means a treatment works consisting of one or more septic tanks with gravity, pumped, or siphoned conveyance to a gravity distributed subsurface drainfield.

"Department" means the Virginia Department of Health.

"Direct dispersal of effluent to ground water" means less than six inches of vertical separation between the point of effluent application or the bottom of a trench or other excavation and ground water.

"Disinfection" means a process used to destroy or inactivate pathogenic microorganisms in wastewater to render them non-infectious.

"Dissolved oxygen" or "DO" means the concentration of oxygen dissolved in effluent, expressed in mg/l or as percent saturation, where saturation is the maximum amount of oxygen that can theoretically be dissolved in water at a given altitude and temperature.

"Division" means the Division of Onsite Sewage and Water Services, Environmental Engineering, and Marina Programs within the department [~~or equivalent~~].

"Effluent" means sewage that has undergone treatment.

"General approval" means that a treatment unit has been evaluated [~~and approved for TL-2 or TL-3~~] in accordance with the requirements of this chapter [and 12VAC5-610 and approved for TL-2 or TL-3 in accordance with this chapter].

"GPD/sf" means gallons per day per square foot.

"Ground water" means any water, except capillary moisture, beneath the land surface in the zone of saturation or beneath the bed of any stream, lake, reservoir, or other body of surface water wholly or partially within the boundaries of this Commonwealth, whatever the subsurface geologic structure in which such water stands, flows, percolates, or otherwise occurs. Ground water includes a seasonal or perched water table.

"High-level disinfection" means a disinfection method that results in a fecal coliform concentration less than or equal to 2.2 colonies/100 ml. Chlorine disinfection requires a minimum total residual chlorine (TRC) concentration at the end of a 30 minute contact time of 1.5 mg/l. Ultraviolet disinfection requires a minimum dose of 50,000 µW-sec/cm^2. Influent turbidity to the disinfection unit shall be less than or equal to 2 Nephelometric turbidity units (NTU) on average.

"Ksat" means saturated hydraulic conductivity.

"Large AOSS" means an AOSS that serves more than three attached or detached single-family residences [with a combined average daily sewage flow greater than 1,000 GPD] or a structure with an average daily sewage flow in excess of 1,000 [~~gpd~~ GPD].

"Limiting feature" means a feature of the soil that limits or intercepts the vertical movement of water, including seasonal, perched or permanent water table, pans, soil restrictions, and pervious or impervious bedrock.

"Local health department" means the local health department having jurisdiction over the AOSS.

"Maintenance" means performing adjustments to equipment and controls and in-kind replacement of normal wear and tear parts such as light bulbs, fuses, filters, pumps, motors, or other like components. Maintenance includes pumping the tanks or cleaning the building sewer on a periodic basis. Maintenance shall not include replacement of tanks, drainfield piping, and distribution boxes or work requiring a construction permit and an installer.

"MGD" means million gallons per day.

"MPI" means minutes per inch.

"Operate" means the act of making a decision on one's own volition to (i) place into or take out of service a unit process or unit processes or (ii) make or cause adjustments in the operation of a unit process at a treatment works.

"Operation" means the biological, chemical, and mechanical processes of transforming sewage or wastewater to compounds or elements and water that no longer possess an adverse environmental or health impact.

"Operator" means any individual employed or contracted by any owner who is licensed or certified under Chapter 23 (§ 54.1-2300 et seq.) of Title 54.1 of the Code of Virginia as being qualified to operate, monitor and maintain an alternative onsite sewage system.

"Organic loading rate" means the biodegradable fraction of chemical oxygen demand (BOD, biodegradable fats, oils, and grease and volatile solids) delivered to a treatment component in a specified time interval expressed as mass per time or area; examples include pounds per day, pounds per cubic foot per day (pretreatment), or pounds per square foot per day (infiltrative surface or pretreatment). For a typical residential system, these regulations assume that biochemical loading (BOD_5) equals organic loading.

"Owner" means the Commonwealth or any of its political subdivisions, including sanitary districts, sanitation district commissions and authorities, or any individual, any group of individuals acting individually or as a group, or any public or private institution, corporation, company, partnership, firm, or association that owns or proposes to own a sewerage system or treatment works.

"pH" means the measure of the acid or base quality of water that is the negative log of the hydrogen ion concentration.

"Pollution" means such alteration of the physical, chemical, or biological properties of any state waters as will or is likely to create a nuisance or render such waters (i) harmful or detrimental or injurious to the public health, safety, or welfare or to the health of animals, fish, or aquatic life; (ii) unsuitable with reasonable treatment for use as present or possible future sources of public water supply; or (iii) unsuitable for recreational, commercial, industrial, agricultural, or other reasonable uses. Pollution shall include any discharge of untreated sewage into state waters.

["Point source discharge" means any discernible, confined, and discrete conveyance including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water run-off.]

"Project area" means one or more recorded lots or a portion of a recorded lot owned by the owner of an AOSS or controlled by easement upon which an AOSS is located or that is contiguous to a soil treatment area and that is designated as such for purposes of compliance with the performance requirements of this chapter. In the case of an

AOSS serving multiple dwellings, the project area may include multiple recorded lots as in a subdivision.

"Project area boundary" [or "project boundary"] means the [physical] limits of the three-dimensional [~~space defined when~~ length, width, and depth of the project area, whereby each dimension is identified as follows:] (i) the horizontal component is the [length and width of the] project area; (ii) the upper vertical limit is the ground surface in and around the AOSS; and (iii) the lower vertical limit is [~~the vertical separation required by this chapter; a permeability limiting feature; or the permanent water table~~ the limiting feature].

[~~"Relationship with an operator" means an agreement between the owner of an AOSS and operator wherein the operator has been retained by the owner to operate the AOSS in accordance with the requirements of this chapter.~~]

"Renewable operating permit" means an operation permit that expires and must be revalidated at a predetermined frequency or schedule in accordance with this chapter.

"Reportable incident" means one or more of the following: an alarm event [lasting more than 24 hours; an alarm event that reoccurs]; any failure to achieve one or more performance requirements; removal of solids; replacement of media; or replacement of any major component of the system including electric and electronic components, pumps, blowers, and valves. The routine [~~maintenance~~ cleaning] of effluent filters is not a reportable incident.

"Saturated hydraulic conductivity" means a quantitative measure of a saturated soil's capacity to transmit water when subjected to a hydraulic gradient.

"Settleable solids" means a measure of the volume of suspended solids that will settle out of suspension within a specified time, expressed in milliliters per liter (ml/l).

"Sewage Handling and Disposal Regulations" means 12VAC5-610 [~~adopted by the board~~ or its successor].

"Small AOSS" means an AOSS that serves no more than three attached or detached single-family residences [with a combined average flow of less than or equal to 1,000 GPD,] or a structure with an average daily sewage flow of less than or equal to 1,000 [~~gpd~~ GPD].

"Soil treatment area" means the physical location in [~~or on~~] the naturally occurring soil medium where final treatment and dispersal of effluent occurs [~~; the soil treatment area includes subsurface drainfields and drip dispersal fields~~].

"Standard disinfection" means a disinfection process that results in a fecal coliform concentration of less than or equal to 200 colonies/100 ml. Chlorine disinfection requires a minimum TRC concentration at the end of a 30 minute contact time of 1.0 mg/l. Influent TSS to the disinfection unit shall average 30 mg/l or less.

"Standard engineering practice" means the care, diligence, competence, and judgment that a reasonably prudent and experienced professional engineer licensed in the Commonwealth of Virginia would exercise given the circumstances, including site and soil conditions, of a particular AOSS design.

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

"Subsurface drainfield" means a system installed within the soil and designed to accommodate treated sewage from a treatment works.

["Surface waters" means: (i) all waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide; (ii) all interstate waters, including interstate wetlands; (iii) all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds and the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (a) that are or could be used by interstate or foreign travelers for recreational or other purposes; (b) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (c) that are used or could be used for industrial purposes by industries in interstate commerce; (iv) all impoundments of waters otherwise defined as surface waters under this definition; (v) tributaries of waters identified in clauses (i) through (iv) of this definition; (vi) the territorial sea; and (vii) wetlands adjacent to waters (other than water that are themselves wetlands) identified in clauses (i) through (vi) of this definition.]

"Total nitrogen" or "TN" means the measure of the complete nitrogen content of wastewater including all organic, inorganic, and oxidized forms expressed in mg/l as nitrogen.

"Total residual chlorine" or "TRC" means a measurement of the combined available chlorine and the free available chlorine available in a sample after a specified contact time.

"Total suspended solids" or "TSS" means a measure of the mass of all suspended solids in a sample typically measured in milligrams per liter (mg/l).

"Treatment level 2 effluent" or "TL-2 effluent" means [secondary] effluent [as defined in 12VAC5-610-120] that has been treated to produce BOD_5 and TSS concentrations equal to or less than 30 mg/l each.

"Treatment level 3 effluent" or "TL-3 effluent" means effluent that has been treated to produce BOD_5 and TSS concentrations equal to or less than 10 mg/l each.

"Treatment unit" or "treatment system" means a method, technique, equipment, or process other than a septic tank or

septic tanks used to treat sewage to produce effluent of a specified quality before the effluent is dispersed to a soil treatment area.

"Turbidity" means a measurement of the relative clarity of effluent as a result of the presence of varying amounts of suspended organic and inorganic materials or color.

"Vertical separation" means the vertical distance between the point of effluent application to the soil or the bottom of a trench or other excavation and a limiting feature of the soil treatment area such as seasonal high ground water, bedrock, or other restriction.

"Wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas [~~and as otherwise identified by the Army Corps of Engineers~~].

12VAC5-613-20. Purpose and authority.

A. Pursuant to the requirements of §§ 32.1-12 [~~and 32.1-163~~, 32.1-163.6, and 32.1-164] of the Code of Virginia, the board has promulgated this chapter to:

1. Establish a program for regulating the operation and maintenance of alternative onsite sewage systems;

2. Establish performance requirements for alternative onsite sewage systems;

3. Establish horizontal setbacks for alternative onsite sewage systems that are necessary to protect public health and the environment;

4. Discharge the board's responsibility to supervise and control the safe and sanitary collection, conveyance, transportation, treatment, and disposal of sewage by onsite sewage systems and treatment works as they affect the public health and welfare;

5. Protect the quality of surface water and ground water;

6. Guide the commissioner in determining whether a permit or other authorization for an alternative onsite sewage system shall be issued or denied; and

7. Inform owners, applicants, onsite soil evaluators, system designers, and other persons of the requirements for obtaining a permit or other authorization for an AOSS.

B. The division may, as it deems necessary, develop best management practices for the purposes of recognizing acceptable methods to reduce pollution from AOSSs.

12VAC5-613-30. Applicability and scope.

A. As provided in this section, this chapter governs the design, construction, and operation of AOSSs.

B. Part II of this chapter, Performance Requirements, applies only to AOSSs with applications filed on or after [~~the effective date of this chapter~~ December 7, 2011].

C. Any AOSS with an application filed prior to [~~the effective date of this chapter~~ December 7, 2011,] is subject to the performance requirements contained in the regulations in effect at the time the system was permitted or the performance requirements contained in the operation permit.

D. Small AOSSs designed, constructed, permitted, and operated in accordance with this chapter; the prescriptive design, location, and construction criteria of 12VAC5-610-20; and the policies and procedures of the department are presumed to comply with the ground water quality requirements of [~~12VAC5-610-90 A~~ 12VAC5-613-90 A].

E. Part III of this chapter, Operation and Maintenance Requirements, shall apply to all AOSSs, including those with applications filed prior to [~~the effective date of this chapter~~ December 7, 2011].

F. Requirements for renewable operation permits contained in this chapter shall apply only to AOSSs with applications filed on or after [~~the effective date of this chapter~~ December 7, 2011].

G. The laboratory sampling requirements of this chapter apply only to AOSSs with applications filed on or after [~~the effective date of this chapter~~ December 7, 2011].

H. Any AOSS with an application filed prior to [~~the effective date of this chapter~~ December 7, 2011,] is subject to the laboratory sampling requirements contained in the regulations in effect at the time the system was permitted or the sampling requirements contained in the operation permit.

I. AOSSs designed pursuant to § 32.1-163.6 of the Code of Virginia are subject to the following requirements:

1. Performance requirements of this chapter [unless waived pursuant to 12VAC5-613-210];

2. Horizontal setback requirements of this chapter;

3. Operation, maintenance, inspection, and sampling requirements of this chapter; and

4. Standard engineering practice.

J. Dispersal of treated or untreated sewage to a wetland [that] is subject to permitting by the Virginia Department of Environmental Quality pursuant to the requirements of Title 62.1 of the Code of Virginia [~~and~~] is specifically excluded from this chapter.

K. Spray irrigation systems are subject to permitting by the Virginia Department of Environmental Quality and are specifically excluded from this chapter.

L. Treatment units for small AOSSs that are recognized by the department as generally approved for TL-2 or TL-3 as of

[~~the effective date of this chapter~~ December 7, 2011,] shall retain such status for a period of five years from [~~the effective date of this chapter~~ December 7, 2011,] after which the units shall be evaluated pursuant to the requirements of this chapter.

M. After [~~the effective date of this chapter~~ December 7, 2011], new applications for general approval for TL-2 or TL-3 shall be subject to the requirements of this chapter. The department may continue to evaluate any treatment unit for small AOSSs that is undergoing evaluation as of [~~the effective date of this chapter~~ December 7, 2011,] using the protocol in place on the date of application for general approval.

[N. The additional nutrient requirements for AOSSs in the Chesapeake Bay watershed contained in 12VAC5-613-90 D shall take effect on [~~July 1, 2013, or two years after the effective date of this chapter, whichever is later~~ December 7, 2013].

12VAC5-613-40. Relationship to other regulations.

A. This chapter is supplemental to 12VAC5-610 (Sewage Handling and Disposal Regulations).

B. All procedures pertaining to enforcement, minimum requirements for filing applications, and processing of applications, including appeals and case decisions contained in the Sewage Handling and Disposal Regulations shall apply to the permitting of AOSSs under this chapter.

C. In any case where there is a conflict between this chapter and the Sewage Handling and Disposal Regulations, this chapter shall [~~be controlling~~ control].

D. This chapter supersedes Table 5.4 of the Sewage Handling and Disposal Regulations for all AOSSs designed to disperse TL-2 or TL-3 effluent. Table 5.4 of the Sewage Handling and Disposal Regulations [(12VAC5-610-950)] shall govern the design of any AOSS designed to disperse septic tank effluent to the soil treatment area [unless waived pursuant to 12VAC5-613-210].

E. [~~In accordance with standard engineering practice, all~~ All] plans and specifications for AOSSs shall be properly sealed by a professional engineer licensed in the Commonwealth pursuant to Title 54.1 of the Code of Virginia unless such plans are prepared pursuant to an exemption from the licensing requirements of Title 54.1 of the Code of Virginia. [All] AOSS designs [~~submitted~~ prepared by a professional engineer shall be reviewed by the department] pursuant to § 32.1-163.6 of the Code of Virginia [~~shall have a statement on the title page of the plans clearly identifying the plans as a § 32.1-163.6 submittal. Where this statement is not included on the title page, the department will review the plans pursuant to the Sewage Handling and Disposal Regulations and applicable policies~~ unless otherwise designated in writing by the professional engineer].

F. When AOSS designs are prepared pursuant to an exemption from the licensing requirements of Title 54.1 of the Code of Virginia, the designer shall provide a certification statement in a form approved by the division identifying the specific exemption under which the plans and specifications were prepared and certifying that the designer is authorized to prepare such plans pursuant to the exemption.

G. [~~In accordance with standard engineering practice, each~~ Each] application under § 32.1-163.6 of the Code of Virginia shall include a site [and soil] characterization report using the Field Book for Describing and Sampling Soils, Version 2.0, National Soil Survey Center, Natural Resources Conservation Service, U.S. Department of Agriculture, September 2002. The report may contain such information that the designer deems appropriate; however, it must describe the following minimum attributes of the site of the proposed soil treatment area:

1. Depth to limiting features, [~~including~~] seasonal or perched water tables, pans, restrictions, or pervious or impervious bedrock;

2. Slope of the project area;

3. Ksat or percolation rate at the proposed installation depth and at depths below the soil treatment area to demonstrate compliance with this chapter. Ksat or percolation rate may be estimated for small AOSSs. The Ksat or percolation rate must be measured using an appropriate device for large AOSSs;

4. Landscape or landform; and

5. Project area along with those physical features in the vicinity of the proposed AOSS normally associated with plans for onsite sewage systems; such physical features include streams, bodies of water, roads, utilities, wells and other drinking water sources, existing and proposed structures, and property boundaries.

12VAC5-613-50. Violations and enforcement.

A. [~~Failure~~ Subject to the limitations of 12VAC5-613-30.B, failure] by any [owner of an] AOSS to achieve one or more performance requirements prescribed by this chapter [or specified for the AOSS] shall be a violation of this chapter.

B. Failure by any owner [~~, operator or person,~~] to comply with the conditions of an operation permit shall be a violation of this chapter.

C. Failure by any owner [~~, operator or person,~~] to accomplish any mandated visit, operation, maintenance, repair, monitoring, sampling, reporting, or inspection requirement prescribed by this chapter shall be a violation of this chapter.

D. Failure [by any owner] to follow the approved operation and maintenance manual (O&M manual) shall be deemed a violation of this chapter when such failure results in the

failure to achieve one or more performance requirements prescribed by this chapter.

E. [Failure by any operator to perform any mandated activity in accordance with 12VAC5-613-110, 12VAC5-613-120, 12VAC5-613-180, or 12VAC5-613-190 shall be a violation of this chapter.

F.] Nothing in this chapter shall be construed to limit the authority of the board, the commissioner, or the department to enforce this chapter or to enforce the requirements of 12VAC5-610.

[~~F.~~ G.] In accordance with the Sewage Handling and Disposal Regulations and § 32.1-25 of the Code of Virginia, the commissioner may take such samples and conduct such monitoring, including ground water samples and monitoring, that he deems necessary to enforce this chapter.

[~~G.~~ H.] The board, commissioner, and department may use any lawful means to enforce this chapter including voiding a construction or operation permit, imposition of civil penalties, or criminal prosecution pursuant to § 32.1-27 of the Code of Virginia.

[I. Except when there is additional evidence that an AOSS has failed to achieve one or more of the performance requirements of this chapter or when a licensed operator has filed a report indicating that an AOSS cannot be returned to normal function via routine maintenance, the department shall not rely solely on the results of an individual grab sample to establish the factual basis for a violation of this chapter.]

12VAC5-613-60. Operation permits and land records.

[~~A. The department shall not issue an operation permit for an AOSS unless the owner has established a relationship with an operator and provided the operator's name and license number to the local health department. The owner shall maintain a relationship with an operator during all periods when the AOSS is in operation.~~

~~B.~~ A.] The department shall not issue an operation permit for an AOSS until the [property] owner has recorded an instrument that complies with § 15.2-2157 E of the Code of Virginia in the land records of the circuit court having jurisdiction over the site of the AOSS. [The local health department shall receive legal documentation indicating that the instrument has been duly recorded before issuance of the operation permit.]

[~~C.~~ B.] When all or part of the project area is to be used in the management of nitrogen from a large AOSS, the [property] owner [or the owner of the AOSS] shall record legal documentation in the land records of the circuit court having jurisdiction over the site of the AOSS. Such documentation shall [~~be in a form approved by the division and shall protect and preserve the land area~~ contain assurances that the land area will be protected and preserved] in accordance with the management methods established by the designer. [The local health department shall receive legal documentation indicating that the instrument has been duly recorded before issuance of the operation permit.]

[~~D.~~ C.] All large AOSSs and any AOSS permitted pursuant to 12VAC5-613-90 C shall be subject a renewable operating permit. Such permits shall be issued for a period of five years. [~~Owners~~ The owner of the AOSS] shall [~~be required to~~] apply for a new permit at least 180 days prior to the expiration date.

12VAC5-613-70. General approval testing and evaluation.

The division shall develop a protocol to verify the expected performance of treatment units of small AOSSs that meet TL-2 or TL-3 effluent quality. The protocol to evaluate and test field performance of TL-3 treatment units shall include the following minimum requirements:

1. The manufacturer shall evaluate at least 20 treatment units installed in the Commonwealth of Virginia for single family residences occupied full-time, year-round throughout the testing and evaluation period;

2. The manufacturer shall provide the division with quarterly results of influent and effluent samples measuring, at a minimum, BOD and TSS for each installed treatment unit;

3. Operation and maintenance shall be performed on each treatment unit during the evaluation period in accordance with the provisions of this chapter; and

4. An independent third party with no stake in the outcome of the approval process shall oversee and administer the testing and evaluation protocol. Examples of an independent third party include faculty members in an appropriate program of an accredited college or university, a licensed professional engineer experienced in the field of environmental engineering, or a testing firm that is [~~deemed by~~ acceptable to] the division [~~to be acceptable~~].

Part II
Performance Requirements

12VAC5-613-80. Performance requirements; general.

All AOSS designed, constructed, and operated pursuant to this chapter shall comply with the following performance requirements [unless waived pursuant to 12VAC5-613-210]:

1. The presence of raw or partially treated sewage on the ground's surface or in adjacent ditches or waterways is prohibited;

2. The exposure of insects, animals, or humans to raw or partially treated sewage is prohibited;

3. The backup of sewage into plumbing fixtures is prohibited;

4. The direct dispersal of effluent into ground water shall comply with 12VAC5-613-90 C;

5. All treatment units and treatment systems shall be designed for the anticipated [receiving] wastewater [~~strength~~ characteristics] and peak flow;

6. Dosing of the treatment unit or treatment system shall accommodate the design peak flow within the treatment unit's rated capacity;

[~~7. The dispersal of septic tank effluent is prohibited for large AOSSs;~~

~~8.~~ 7.] The AOSS shall be designed so that all components are of sufficient structural integrity to minimize the potential of physical harm to humans and animals;

[~~9.~~ 8.] The conveyance system for any AOSS shall be designed and installed with sufficient structural integrity to resist inflow and infiltration and to maintain forward flow;

[~~10.~~ 9.] The AOSS shall be designed to minimize noise, odor, or other nuisances at the property boundary;

[~~11.~~ 10.] Maximum trench bottom hydraulic loading rates for pressure-dosed systems using TL-2 and TL-3 effluent are found in Table 1 and are to be used as follows:

a. The designer is responsible for reducing loading rates according to the features and properties of the soils in the soil treatment area as well as for reducing loading rates for other types of dispersal;

b. Adherence to the maximum [~~sizing~~ trench bottom hydraulic loading rate] criteria herein does not assure or guarantee that other performance requirements of this chapter, including effluent dispersal or ground water quality, will be met. It is the designer's responsibility to ensure that the proposed design is adequate to achieve all performance requirements of this chapter;

c. Trench bottom hydraulic loading rates for pressure-dosed systems shall not exceed the values in Table 1;

d. [~~Trench bottom hydraulic loading rates shall be reduced from the values in Table 1~~ Hydraulic loading rates shall be incrementally reduced from the TL-2 values in Table 1] when a treatment unit or system is not designed to achieve TL-2 or TL-3. In such cases, the designer shall, for monitoring purposes, specify the effluent quality of the treatment unit. If the specified BOD_5 exceeds 60 mg/l, the designer shall use loading rates for septic tank effluent;

e. Trench bottom hydraulic loading rates for gravity dosed systems shall be reduced from the values in Table 1; and

f. Area hydraulic loading rates for systems such as drip dispersal, pads, [~~spray irrigation,~~] and mounds shall be reduced from the values in Table 1 and shall reflect standard engineering practice.

Table 1
Maximum Pressure-Dosed Trench Bottom Hydraulic Loading Rates

Percolation Rate (MPI)	[Saturated hydraulic conductivity (cm/day)	TL-2 Effluent (gpd/sf)	TL-3 Effluent (gpd/sf)
≤15	> 17	1.8	3.0
15 to 25	15 to 17	1.4	2.0
>25 to 45	10 to < 15	1.2	1.5
>45 to 90	4 to < 10	0.8	1.0
>90	< 4]	0.4	0.5

[~~12.~~ 11.] Septic tank effluent may only be discharged to a soil treatment area when the vertical separation to a limiting feature consists of at least 18 inches of naturally-occurring, in-situ soil. AOSSs designed to disperse septic tank effluent require at least 12 inches of soil cover over the soil treatment area;

[~~13. Adequate vertical separation shall be maintained to ensure the performance requirements of this chapter. Adequate vertical separation shall be demonstrated as follows:~~ 12. Whenever the depth to a permeability limiting feature on the naturally occurring site is less than 18 inches as measured from the ground surface, whenever the treatment works does not provide at least 18 inches of vertical separation to a permeability limiting feature, or whenever the design is for a large AOSS, then the following shall apply:]

a. [~~For any small AOSS where the vertical separation to a permeability limiting feature is less than 18 inches below the point of effluent application or the bottom of the trench or other excavation, or where the vertical separation to ground water is less than six inches in the naturally-occurring soil, the~~ The] designer shall demonstrate that (i) the site is not flooded during the wet season, (ii) there is a hydraulic gradient sufficient to move the applied effluent off the site, and (iii) water mounding will not adversely affect the functioning of the soil treatment area or create ponding on the surface;

[~~b. For any large AOSS regardless of site constraints, the designer shall demonstrate that (i) the site is not flooded during the wet season, (ii) there is a hydraulic gradient sufficient to move the applied effluent off the site, and (iii) water mounding will not adversely affect the functioning of the soil treatment area or create ponding on the surface;~~

~~c.~~ b.] For large AOSSs, the department may require the owner to monitor the degree of saturation beneath the soil treatment area [to verify that water mounding is not affecting the vertical separation]; and

[~~d.~~ c.] For any system in which artificial drainage is proposed as a method to meet the requirements of this chapter, the designer shall provide calculations [~~and~~ or] other documentation sufficient to demonstrate the effectiveness of the proposed drainage.

[~~14.~~ 13] The following minimum effluent quality shall be met for the described vertical separation to limiting feature as measured from the point of effluent application or the bottom of the trench or other excavation:

Table 2
Minimum Effluent Requirements for Vertical Separation to Limiting Features

Vertical [~~separation~~ Separation]	Minimum Effluent Quality
≥18" (requires naturally occurring, undisturbed soils)	Septic
<18" to 12" (requires minimum 6" of naturally occurring, undisturbed soils)	TL-2
0" to <12"	TL-3 and standard disinfection*

*Note: Where direct dispersal of effluent to ground water occurs, effluent quality shall be governed by 12VAC5-613-90 C.

[~~15. The organic loading rate shall not exceed 2.1 x 10^{-4} BOD lb/day/sf on a trench-bottom basis; and~~

~~16.~~ 14.] The designer shall specify methods and materials that will achieve the performance requirements of this chapter whenever sand, soil, or soil-like material is used to increase the vertical separation.

[15. All treatment units or treatment systems shall prevent the bulking of solids to the treatment area.]

12VAC5-613-90. Performance requirements; ground water protection.

A. The AOSS shall not pose a greater risk of ground water pollution than systems otherwise permitted pursuant to 12VAC5-610. After wastewater has passed through a treatment unit or septic tank and through the soil in the soil treatment area, the concentration of fecal coliform organisms shall not exceed 2.2 cfu/100 ml at the lower vertical limit of the project area boundary.

B. Each large AOSS shall comply with TN limit of 5 mg/l at the project area boundary. Prior to the issuance of a construction permit, the designer shall demonstrate compliance with this requirement through modeling or other calculations. Such demonstration may incorporate multiple nitrogen removal methods such as pretreatment, vegetative uptake (only for AOSSs with shallow soil treatment areas), denitrification, and other viable nitrogen management methods. Ground water and other monitoring may be required at the department's discretion.

C. AOSSs with direct dispersal of effluent to ground water are subject to the following requirements:

1. If the concentration of any constituent in ground water is less than the limits set forth at 9VAC25-280, the natural quality for the constituent shall be maintained; natural quality shall also be maintained for all constituents not set forth in 9VAC25-280. If the concentration of any constituent in ground water exceeds the limit in the standard for that constituent, no addition of that constituent to the naturally occurring concentration shall be made. The commissioner shall consult with the Department of Environmental Quality prior to granting any variance from this subsection.

2. Ground water and laboratory sampling in accordance with 12VAC5-613-100 G.

3. The treatment unit or system shall comply with the following at a minimum:

a. The effluent quality from the treatment unit or system shall be measured prior to the point of effluent application to the soil treatment area and shall be as follows: BOD_5 and TSS concentrations each equal to or less than 5 mg/l; fecal coliform concentrations less than or equal to 2.2 col/100 ml as a geometric mean with no [~~single~~] sample exceeding 14 col/100 ml; [and] TN [~~of~~] concentration of less than 5 mg/l [~~, except in the Chesapeake Bay Watershed where the TN concentration shall be less than or equal to 3 mg/l; and total phosphorus concentration of less than 1 mg/l, except in the Chesapeake Bay Watershed where the total phosphorus concentration shall be less than or equal to 0.3 mg/l~~];

b. High level disinfection is required; and

c. Treatment systems shall incorporate filtration capable of demonstrating compliance with an average turbidity of less than or equal to 2 NTU prior to disinfection.

4. Gravity dispersal to the soil treatment area is prohibited.

5. Loading rates to the soil treatment area shall not exceed the loading rates in Table 1 of this section.

6. A renewable operating permit shall be obtained and maintained in accordance with 12VAC5-613-60 D.

7. The designer shall provide sufficient hydrogeologic analysis to demonstrate that a proposed AOSS will function as designed for the life of the structure served without degradation of the soil treatment area. This shall include a determination of ground water flow direction and rate.

D. The following additional nutrient requirements apply to all AOSSs in the Chesapeake Bay Watershed:

1. All small AOSSs shall provide a 50% reduction of TN as compared to a conventional gravity drainfield system; compliance with this subdivision may be demonstrated through the following:

a. Compliance with one or more best management practices [~~approved~~ recognized] by the division [such as the use of a NSF 245 certified treatment]; or

b. Relevant and necessary calculations provided to show one or both of the following:

(1) Effluent TN concentration of 20 mg/l measured prior to application to the soil dispersal field; or

(2) A mass loading of 4.5 lbs N or less per person per year at the project boundary provided that no reduction for N is allotted for uptake or denitrification for the dispersal of effluent below the root zone (>18 inches below the soil surface).

[~~2. All large AOSSs shall demonstrate less than 3 mg/l TN at the project boundary. Dilution may not be used to demonstrate compliance with this subdivision. At a minimum, the treatment system shall provide for the following effluent quality prior to application to the soil dispersal field:~~

~~Table 3~~
~~Maximum TN Effluent Quality Requirements for Large AOSSs~~

~~Design Flow~~	~~Maximum Total Nitrogen Effluent Concentration from Treatment System as TN~~
~~>1000 gpd to 40,000 gpd~~	~~20 mg/l~~
~~> 40,000 gpd to 100,000 gpd~~	~~10 mg/l~~
~~>100,000 gpd~~	~~5 mg/l~~

~~3. Ground water and other monitoring may be required at the department's discretion for large AOSSs.~~

~~E. No portion of an AOSS soil treatment area may be located in a wetland. Other portions of an AOSS may be located in wetlands subject to approval or permitting, as appropriate, by the Virginia Department of Environmental Quality.~~

2. All large AOSSs up to and including 10,000 gallons per day shall provide a 50% reduction of TN at the project boundary as compared to a conventional gravity drainfield system. Compliance with this subdivision may be demonstrated as follows:

a. A demonstrated effluent quality of less than or equal to 20 mg/l TN measured prior to application to the soil treatment area; or

b. In situ monitoring of the treatment works within 24 vertical inches of the point of effluent application to the soil treatment area to demonstrate the effluent leaving the treatment works has a TN concentration of less than or equal to 20 mg/l. The designer shall identify an intermediate compliance point within the treatment system and a corresponding TN concentration for use in the event that a representative in situ sample cannot be obtained. The intermediate compliance point and the corresponding TN concentration for use must be approved by the department and shall be conditions of the operation permit.

The AOSS operation permit shall be conditioned upon compliance with the constituent concentrations approved pursuant to this subdivision.

3. All large AOSSs over 10,000 gallons per day shall comply with the following TN requirements:

a. A demonstrated effluent quality of less than or equal to 8 mg/l TN measured prior to application to the soil treatment area; or

b. In situ monitoring of the treatment works within 24 vertical inches of the point of effluent application to the soil treatment area to demonstrate the effluent leaving the treatment works has a TN concentration of less than or equal to 5 mg/l. The designer shall identify an intermediate compliance point within the treatment system and a corresponding TN concentration for use in the event that a representative in situ sample cannot be obtained. The intermediate compliance point and the corresponding TN concentration for use must be approved by the department and shall be conditions of the operation permit.

The AOSS operation permit shall be conditioned upon compliance with the constituent concentrations approved pursuant to this subdivision.

4. For direct dispersal of effluent to groundwater in the Chesapeake Bay Watershed, TN concentration shall be less than or equal to 3 mg/l and total phosphorus concentration shall be less than or equal to 0.3 mg/l.]

12VAC5-613-100. Performance requirements; laboratory sampling and monitoring.

A. Laboratory sampling is not required for any small AOSS with an installed soil treatment area that is sized for septic tank effluent and complies with the requirements of 12VAC5-610 for septic tank effluent.

B. All effluent samples must be taken at the end of all treatment, prior to the point where the effluent is discharged to the soil treatment area [unless changed pursuant to 12VAC5-610-90 or 12VAC5-610-210]. The designer shall identify the sampling points. When required, the sampling point for chlorine disinfection shall be at the end of the chlorine contact tank if TRC is to be used to measure compliance.

C. All sampling and monitoring shall be conducted according to procedures approved under 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency unless other procedures have been specified in this chapter.

D. The owner of each small AOSS [~~is required to submit~~ must ensure that] an initial grab sample of the effluent from the treatment unit [~~and have the sample~~ is collected within 180 days of system operation. The sample must be] analyzed in accordance with 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency within the first 180 days of operation. Thereafter, if the treatment unit has received general approval, a grab sample is required once every five years. Samples shall be analyzed for BOD_5 and, if disinfection is required, fecal coliform. Treatment units utilizing chlorine disinfection may alternatively sample for TRC instead of fecal coliform. Sample results shall be submitted to the local health department by the 15th of the month following the month in which the sample was taken.

E. For small AOSSs that utilize a treatment unit that has not received general approval, in addition to the initial sample required by subsection D of this section, four additional grab samples of the effluent from the treatment unit shall be collected, analyzed, and submitted to the department within the first two years of operation and annually thereafter. The interval for collecting the samples shall not be less than quarterly or more than semiannually. Sample results shall be submitted to the local health department by the 15th of the month following the month in which the sample was taken. After two years of sampling in accordance with this subsection, the owner may submit a request to the department to reduce the sampling frequency to once every five years. The department shall grant such requests if the mean of five or more consecutive samples complies with the applicable performance requirements of this chapter.

F. Sampling and monitoring requirements for AOSS treatment systems with flows greater than 1,000 [~~gpd~~ GPD] are contained in Table [~~4~~ 3]:

Table [~~4~~ 3]
Sampling and Monitoring for Large AOSSs

PLANT SIZE	≥2.0 MGD	≥1.0 [- to] 2.0 MGD	≥ [~~0.1~~ 100,000 GPD to] 1.0 MGD	[~~≥0.04 0.1 MGD~~ ≥ 40,000 GPD to 100,000 GPD]	[~~≥0.010 0.04 MGD~~ >10,000 GPD to 40,000 GPD]	[~~≥0.001 0.010 MGD~~ >1,000 GPD to 10,000 GPD]
Flow	Totalizing, Indicating, & Recording	Totalizing, Indicating, & Recording	Totalizing, Indicating, & Recording	Totalizing, Indicating, & Recording	Measured	[Measured or] Estimate
BOD_5, TSS	24-HC* 1/day	24-HC 5 days/wk	8-HC 3 days/wk	4-HC 1 day/wk	Grab quarterly	Grab 1/yr
Total Nitrogen	24-HC weekly	24-HC weekly	8-HC monthly	4-HC quarterly	Grab quarterly	Grab 1/yr
TRC, End of Contact Tank**	Grab daily	Grab daily	Grab weekly	Grab weekly	Grab weekly	Grab 1/yr
Fecal Coliform***	Grab weekly	Grab weekly	Grab monthly	Grab monthly	Grab quarterly	Grab 1/yr

*HC – hourly, flow weighted composite samples

** if disinfection required and chlorine used

***if disinfection required [~~and another disinfecting process such as ultraviolet light is used~~ and a disinfectant other than chlorine used]

G. Systems with direct dispersal to ground water as described in 12VAC5-613-90.C shall comply with the following:

1. Small AOSS treatment systems:

a. Shall incorporate a method to [~~continuously~~ remotely] monitor the operation of [~~critical~~] treatment units [and processes], including the status of the disinfection unit, and automatically notify the operator and local health department if an alarm condition occurs;

b. Shall be sampled quarterly in accordance with 12VAC5-613-90 C and as defined in the renewable operating permit; and

c. No treatment units or systems shall be deemed generally approved.

2. Large AOSSs must be continuously monitored for the proper operation of all treatment units. If the wastewater treatment works is not manned 24 hours a day, telemetry shall be provided that monitors all critical systems, including turbidity into the disinfection unit and the functionality of the disinfection unit, and notifies the operator [~~of alarm conditions~~ and local health department if an alarm condition occurs].

[a.] Treatment works with a design flow of less than 40,000 [~~gpd~~ GPD] shall be sampled at least monthly in accordance with 12VAC5-613-90 C and as defined in the renewable operating permit.

[b.] Treatment works with a design flow of 40,000 [~~gpd~~ GPD] or greater shall be sampled at the frequency specified in Table [~~4~~ 3] of this section. Total phosphorus and other limited parameters not listed in Table [~~4~~ 3] of this section shall be conducted at a frequency defined in the renewable operating permit. [The treatment works must comply with the continuous operability requirements of a Reliability Class I rating as described in 9VAC25-790. Appropriate backup power sources, equipment redundancy, and failsafe modes must be in place.]

3. Ground water monitoring is required for all large AOSSs with direct dispersal of effluent to the ground water and such monitoring shall be conducted in accordance with the renewable operating permit.

12VAC5-613-110. Performance requirements; field measurements, sampling, and observations.

A. For treatment units or treatment systems with flows [~~up to 0.04 MGD, field measurements, sampling, and observations shall be performed at each mandated visit and during any reportable incident response visit as recommended in Table 5. The operator shall report the results of all field measurements, sampling, and observations~~ greater than 1,000 GPD and less than or equal to 40,000 GPD, the following parameters shall be evaluated or tested when applicable: flow, pH, TRC, DO, odor, turbidity (visual), and settleable solids].

~~Table 5~~
~~Recommended Field Measurements, Sampling, and Observations~~
~~for AOSSs up to 0.04 MGD~~

~~Parameter~~	~~Average Daily Flow (gpd)~~		
-	~~≤ 1,000 gpd~~	~~>0.001-0.010 MGD~~	~~>0.01-0.04 MGD~~
~~Flow~~	~~Required (measured or estimated)~~	~~Required~~	~~Required~~
~~pH~~	~~Operator discretion~~	~~Required~~	~~Required~~
~~TRC (After contact tank)*~~	~~Required~~	~~Required~~	~~Required~~
~~DO**~~	~~Operator discretion~~	~~Required~~	~~Required~~
~~Odor*~~	~~Operator discretion~~	~~Required~~	~~Required~~
~~Turbidity (visual)*~~	~~Operator discretion~~	~~Required~~	~~Required~~
~~Settleable solids**~~	~~Operator discretion~~	~~Required~~	~~Required~~

~~*Not required for systems without chlorine disinfection~~

~~**Not required for systems without an activated sludge component~~]

B. For treatment systems with flows greater than [~~0.04 MDG~~ 40,000 GPD], the operator shall follow the operational and control testing requirements of the O&M manual.

Part III
Operation and Maintenance Requirements

12VAC5-613-120. Operator responsibilities.

A. Whenever an operator performs a visit that is required by this chapter or observes a reportable incident, he shall

document the results of that visit in accordance with 12VAC5-613-190 [or as otherwise specified in the operation permit].

B. Whenever an operator performs a visit that is required by this chapter, he shall do so in such a manner as to accomplish the various responsibilities and assessments required by this chapter through visual or other observations and through laboratory and field tests that are required by this chapter or that he deems appropriate.

C. Each operator shall keep an electronic or hard copy log for each AOSS for which he is responsible. The operator shall provide a copy of the log to the owner. In addition, the operator shall make the log available to the department upon request. At a minimum, the operator shall record the following items in the log:

1. Results of all testing and sampling;

2. Reportable incidents;

3. Maintenance, corrective actions, and repair activities that are performed other than for reportable incidents;

4. Recommendations for repair and replacement of system components;

5. Sludge or solids removal; and

6. The date reports were given to the owner.

D. When performing activities pursuant to a visit that is required by this chapter, the operator is responsible for the entire AOSS, including treatment components and soil treatment area components [and the operator shall follow the approved O&M manual].

[~~E. An operator shall notify the appropriate local health department when his relationship with an owner terminates.~~]

12VAC5-613-130. Sludge and solids removal.

Any person who pumps or otherwise removes sludge or solids from any septic tank or treatment unit of an AOSS shall file a report with the appropriate local health department on a form approved by the division.

12VAC5-613-140. Owner responsibilities.

It is the owner's responsibility to do the following:

[~~1. Maintain a relationship with an operator;~~

~~2.~~ 1.] Have the AOSS operated and maintained by an operator;

[~~3.~~ 2.] Have an operator visit the AOSS at the frequency required by this chapter;

[~~4.~~ 3.] Have an operator collect any samples required by this chapter;

[~~5.~~ 4.] Keep a copy of the log provided by the operator on the property where the AOSS is located in electronic or hard copy form, make the log available to the department upon request, and make a reasonable effort to transfer the log to any future owner;

[~~6. Keep~~ 5. Follow the O&M manual and keep] a copy of the O&M manual in electronic or hard copy form for the AOSS on the property where the AOSS is located, make the O&M manual available to the department upon request, and make a reasonable effort to transfer the O&M manual to any future owner; and

[~~7.~~ 6.] Comply with the onsite sewage system requirements contained in local ordinances adopted pursuant to the Chesapeake Bay Preservation Act (§ 10.1-2100 et seq. of the Code of Virginia) and the Chesapeake Bay Preservation Area Designation and Management Regulations (9VAC10-20) when an AOSS is located within a Chesapeake Bay Preservation Area.

12VAC5-613-150. Operator requirements for AOSS with flows up to [~~0.04 MGD~~ 40,000 GPD], minimum frequency of visits.

The owner of each AOSS shall have that AOSS visited by an operator in accordance with Table [~~6.~~ 4.]

Table [~~6~~ 4]
Minimum Operator Visit Frequency for AOSSs up to [~~0.04 MGD~~ 40,000 GPD]

Avg. Daily Flow	Initial Visit	Regular visits following initial visit
≤ 1,000 [~~gpd~~ GPD]	Within 180 calendar days of the issuance of the operation permit	Every 12 months
[~~>0.001-0.010 MGD~~ > 1,000 GPD to 10,000 GPD]	First week of actual operation	Quarterly
[~~>0.010-0.04 MGD~~ >10,000 GPD to 40,000 GPD]	First week of actual operation	Monthly

12VAC5-613-160. Operator requirements for systems with flows greater than [~~0.04 MGD~~ 40,000 GPD].

A. AOSSs with average daily flows [~~in excess of 0.04 MGD~~ greater than 40,000 GPD] shall be attended by a licensed operator and manned in accordance with the recommendations specified in the Sewage Collection and Treatment Regulations for sewage treatment works (9VAC25-790).

B. [~~In instances where the hours of attendance by a licensed operator are less than the daily hours the treatment works is to~~

~~be manned by operating staff. A licensed operator is not required to be physically located at the treatment works site during the remaining designated manning hours provided that the licensed operator is able to respond to requests for assistance in a satisfactory manner as described in the O&M manual~~ When the operating staff cannot be physically present at the treatment works site during the designated manning hours, then the operating staff shall have a method in place for an operator to respond to the operation and maintenance needs of the treatment works within the timeframe provided by the O&M manual or as otherwise directed by the department].

C. [~~Notwithstanding the language of the Sewage Collection and Treatment Regulations for sewage treatment works (9VAC25-790), attendance by the operator may not be waived~~ Attendance by the operator pursuant to this section shall not be waived].

D. The department may reduce operator or staffing requirements when automatic monitoring, telemetry, or other electronic monitoring or process controls are employed. All reductions must be approved by the division director.

12VAC5-613-170. Operation and maintenance manual.

A. This chapter outlines the minimum requirements for operation, maintenance, sampling, and inspection of AOSSs. Operation, maintenance, sampling, and inspection schedules for some AOSSs may exceed these minimum requirements, in which case the designer is responsible for determining such additional requirements based upon the proposed use, design flow, project area, loading rates, nitrogen removal, treatment level, and other factors.

B. Prior to the issuance of an operation permit, the owner shall [~~have the designer submit~~ ensure that] an O&M manual [is submitted] to the local health department for approval. [~~The designer shall provide a copy of the O&M manual to the owner.~~]

C. The O&M manual shall [~~be written to~~] be easily understood by any potential owner and shall include the following minimum items:

1. Basic information on the AOSS design including treatment [~~unity~~ unit] capacity, installation depth, pump operating conditions, a list of the components comprising the AOSS, a dimensioned site layout, sampling locations, and contact information for replacement parts for each unit process;

2. A list of any control functions and how to use them;

3. All operation, maintenance, sampling, and inspection schedules for the AOSS, including any requirements that exceed the minimum requirements of this chapter;

4. The performance (laboratory) data sampling and reporting schedule;

5. The limits of the AOSS design and how to operate the system within those design limits;

6. For systems with flows greater than [~~0.04 MGD~~ 40,000 GPD], the O&M manual shall include operational and control testing recommendations that shall be based upon 9VAC25-790-970; and

7. Other information deemed necessary or appropriate by the designer.

12VAC5-613-180. Mandatory visits; inspection requirements.

When an operator is required to make a visit to an AOSS the operator shall, at a minimum, accomplish the following:

1. Inspect all components of the AOSS and conduct field measurements, sampling, and other observations required by this chapter, the O&M manual, or deemed necessary by the operator to assess the performance of the AOSS and its components.

2. Review and evaluate the operation of the AOSS, perform routine maintenance, make adjustments, and replace worn or dysfunctional components with functionally equivalent parts such that the system can reasonably be expected to return to normal operation.

3. If the AOSS is not functioning as designed or in accordance with the performance requirements of this chapter and, in the operator's professional judgment, cannot be reasonably expected to return to normal operation through routine operation and maintenance report immediately to the owner the remediation efforts necessary to return the AOSS to normal [~~function~~ operation].

12VAC5-613-190. Reports.

When required to file a report, the operator shall complete the report in a form approved by the division. In accordance with § 32.1-164 H of the Code of Virginia, the operator shall file each report using a web-based system and pay the required fee. The operator may, solely at his own discretion, file reports in addition to those required by this chapter. Each report shall be filed by the 15th of the month following the month in which the visit occurred and shall include the following minimum elements:

1. The name and license number of the operator;

2. The date and time of the report;

3. The purpose of the visit, such as required visit, follow-up, or reportable incident;

4. A summary statement stating whether:

a. The AOSS is functioning as designed and in accordance with the performance requirements of this chapter;

b. After providing routine operation and maintenance, the operator believes the AOSS will return to normal operation; or

c. The system is not functioning as designed or in accordance with the performance requirements of this chapter and additional actions are required by the owner to return the AOSS to normal operation;

5. All maintenance performed or adjustments made, including parts replaced;

6. The results of field measurements, sampling, and observations;

7. The name of the laboratory that analyzed samples, if appropriate; and

8. A statement certifying the date the operator provided a copy of the report in electronic or hard copy form to the owner.

Part IV
Horizontal Setback Requirements

12VAC5-613-200. Horizontal setback requirements.

AOSSs designed pursuant to § 32.1-163.6 of the Code of Virginia are subject to the following horizontal setbacks that are necessary to protect public health and the environment:

1. The horizontal setback distances as found in 12VAC5-610 that apply to public and private drinking water sources of all types, including wells, springs, reservoirs, and other surface water sources, except that in cases where an existing sewage system is closer to a private drinking water source, the AOSS shall be no closer to the drinking water source than the existing sewage system;

2. The horizontal setback distances that apply to shellfish waters as found in 12VAC5-610;

3. The horizontal setback distances that apply to sink holes as found in 12VAC5-610;

4. A five foot horizontal separation [~~from wetlands from the edge of the soil treatment area~~ to a wetland that is subject to permitting by the Virginia Department of Environmental Quality pursuant to the requirements of Title 62.1 of the Code of Virginia]; and

5. Unless the AOSS complies with the ground water protection requirements of 12VAC5-613-90.C, a horizontal separation between the soil treatment area and any drainage trench or excavation that comes within six inches vertically of ground water shall be as follows:

a. AOSSs utilizing septic tank effluent shall be subject to a horizontal separation contained in 12VAC5-610;

b. AOSSs utilizing TL-2 or TL-3 (without disinfection) shall be subject to a horizontal separation of 20 feet; and

c. AOSSs utilizing TL-3 with disinfection shall be subject to a horizontal separation of 10 feet.

[Part V
Waivers from Certain Performance Requirements

12VAC5-613-210. Waivers from certain performance requirements.

A. A professional engineer designing a treatment works pursuant to § 32.1-163.6 of the Code of Virginia may deviate from the design criteria in subdivisions 10, 11, and 13 of 12VAC5-613-80 and from the laboratory sampling location specified in 12VAC5-613-100 B through F in accordance with this part.

B. Designs pursuant to this part shall at a minimum be substantiated by:

1. Documentation from applicable engineering standards, texts, or other publications;

2. Relevant peer-reviewed research; or

3. Regulations or technical guidance from other states or the U.S. Environmental Protection Agency.

C. The soil treatment area shall be adequately sized to accommodate the hydraulic and organic capacity of the underlying soil to be used;

D. Sampling and monitoring pursuant to 12VAC5-613-100 B through F may be accomplished either in situ, immediately beneath the soil treatment area and within 24 inches of the point of effluent application, or within the treatment system at a point identified by the design engineer.

1. The professional engineer shall provide a sampling and monitoring plan to demonstrate that the design complies with the water quality standards in 12VAC5-613-90.

2. For in situ monitoring, the design engineer shall specify locations within the soil treatment area's zone of influence (i.e., mounding) where samples representative of the effluent quality being achieved by the treatment works can be collected. Monitoring wells or lysimeters shall be located at least six inches above any seasonal or permanent water table. Monitoring may be conducted using sampling wells, lysimeters, or other methods approved by the department. Suction lysimeters may not be used for fecal coliform monitoring.

3. The design engineer shall identify an intermediate compliance point (or points) within the treatment system along with corresponding constituent concentrations (e.g., BOD_5, fecal coliforms) for use if in situ monitoring is not desired or if an in situ sample cannot be obtained for any reason. The intermediate compliance point and the corresponding constituent concentrations shall be approved by the department. The AOSS operation permit shall be

conditioned upon compliance with the constituent concentrations approved pursuant to this subdivision.

E. The following additional performance requirements shall apply to in situ monitoring:

1. BOD_5 less than or equal to 5 mg/l.

2. Fecal coliforms less than or equal to 2.2 col/100 ml.

F. The frequency of sampling shall be in accordance with 12VAC5-613-100.]

NOTICE: The following form used in administering the regulation has been filed by the agency. The form is not being published; however, online users of this issue of the Virginia Register of Regulations may click on the name of the form to access it. The form is also available for public inspection from the agency contact or at the Office of the Registrar of Regulations, General Assembly Building, 2nd Floor, Richmond, Virginia 23219.

FORMS (12VAC5-613)

Alternative Onsite Sewage System Inspection Report (eff. 10/10).

DOCUMENTS INCORPORATED BY REFERENCE (12VAC5-613)

Field Book for Describing and Sampling Soils, Version 2.0, September 2002, National Soil Survey Center, Natural Resources Conservation Service, U.S. Department of Agriculture.

VA.R. Doc. No. R10-2164; Filed October 19, 2011, 9:01 a.m.

STATE BOARD OF BEHAVIORAL HEALTH AND DEVELOPMENTAL SERVICES

Final Regulation

Title of Regulation: **12VAC35-105. Rules and Regulations for the Licensing of Providers of Mental Health, Mental Retardation, Substance Abuse, the Individual and Family Developmental Disabilities Support Waiver, and Residential Brain Injury Services (amending 12VAC35-105-10 through 12VAC35-105-70, 12VAC35-105-90, 12VAC35-105-100, 12VAC35-105-110, 12VAC35-105-115, 12VAC35-105-130 through 12VAC35-105-240, 12VAC35-105-260 through 12VAC35-105-560, 12VAC35-105-580 through 12VAC35-105-620, 12VAC35-105-650, 12VAC35-105-660, 12VAC35-105-680, 12VAC35-105-690, 12VAC35-105-700, 12VAC35-105-710, 12VAC35-105-720, 12VAC35-105-740, 12VAC35-105-750, 12VAC35-105-770, 12VAC35-105-790 through 12VAC35-105-840, 12VAC35-105-870 through 12VAC35-105-910, 12VAC35-105-925, 12VAC35-105-930 through 12VAC35-105-1020, 12VAC35-105-1040, 12VAC35-105-1050, 12VAC35-105-1060, 12VAC35-105-1080, 12VAC35-105-1090, 12VAC35-105-1100, 12VAC35-105-1110, 12VAC35-105-1140 through 12VAC35-105-1250, 12VAC35-105-1270 through 12VAC35-105-1370, 12VAC35-105-1390, 12VAC35-105-1400, 12VAC35-105-1410; adding 12VAC35-105-155, 12VAC35-105-265, 12VAC35-105-325, 12VAC35-105-645, 12VAC35-105-665, 12VAC35-105-675, 12VAC35-105-691, 12VAC35-105-693, 12VAC35-105-1055, 12VAC35-105-1235, 12VAC35-105-1255; repealing 12VAC35-105-630, 12VAC35-105-640, 12VAC35-105-670, 12VAC35-105-730, 12VAC35-105-850, 12VAC35-105-860).**

Statutory Authority: § 37.2-203 of the Code of Virginia.

Effective Date: December 7, 2011.

Agency Contact: Les Saltzberg, Director, Office of Licensing, Department of Behavioral Health and Developmental Services, 1220 Bank Street, P.O. Box 1797, Richmond, VA 23218, telephone (804) 371-6885, FAX (804) 692-0066, or email les.saltzberg@dbhds.virginia.gov.

Summary:

The amendments reflect the recodification of Title 37.1 of the Code of Virginia to Title 37.2. The regulation is revised to be consistent with the system's mission and goals of person-centered planning, recovery, and the empowerment of individuals receiving services. Provisions have been added to strengthen the ability of the licensing authority to take disciplinary action or to impose restrictions when providers fail to comply with licensing standards and deny licenses to applicants under certain conditions, when appropriate. The licensing requirements and definitions have been updated to reflect current practice and relevant regulations and laws.

The most significant changes to the regulations from the published proposed regulations include (i) modifications to reflect 2010 Medicaid regulatory changes and (ii) clarifications regarding professional qualifications and provider staffing requirements that are based on the intensity and nature of the services being provided.

Summary of Public Comments and Agency's Response: A summary of comments made by the public and the agency's response may be obtained from the promulgating agency or viewed at the office of the Registrar of Regulations.

CHAPTER 105
RULES AND REGULATIONS FOR ~~THE~~ LICENSING ~~OF~~ PROVIDERS ~~OF MENTAL HEALTH, MENTAL RETARDATION, SUBSTANCE ABUSE, THE INDIVIDUAL AND FAMILY DEVELOPMENTAL DISABILITIES SUPPORT WAIVER, AND RESIDENTIAL BRAIN INJURY~~ BY THE DEPARTMENT OF BEHAVIORAL HEALTH AND DEVELOPMENTAL SERVICES

Part I
General Provisions

Article 1
Authority and Applicability

12VAC35-105-10. Authority and applicability.

A. Section ~~37.1-179.1~~ 37.2-404 of the Code of Virginia authorizes the commissioner to license providers subject to rules and regulations ~~promulgated~~ adopted by the State ~~Mental Health, Mental Retardation and Substance Abuse Services~~ Board of Behavioral Health and Developmental Services.

B. No provider shall establish, maintain, conduct [,] or operate any service ~~for persons with mental illness or mental retardation or persons with substance addiction or abuse~~ without first receiving a license from the commissioner.

Article 2.
Definitions

12VAC35-105-20. Definitions.

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

"Abuse" (§ 37.2-100 of the Code of Virginia) means any act or failure to act by an employee or other person responsible for the care of an individual ~~receiving services~~ in a facility or program operated, licensed, or funded by the department, excluding those operated by the Virginia Department of Corrections, that was performed or was failed to be performed knowingly, recklessly, or intentionally, and that caused or might have caused physical or psychological harm, injury, or death to ~~an individual~~ a person receiving ~~services~~ care or treatment for mental illness, mental retardation (intellectual disability), or substance abuse (substance use [~~disorder~~ disorders]). Examples of abuse include~~, but are not limited to, the following~~ acts such as:

1. Rape, sexual assault, or other criminal sexual behavior;

2. Assault or battery;

3. Use of language that demeans, threatens, intimidates, or humiliates the person;

4. Misuse or misappropriation of the person's assets, goods, or property;

5. Use of excessive force when placing a person in physical or mechanical restraint;

6. Use of physical or mechanical restraints on a person that is not in compliance with federal and state laws, regulations, and policies, professional accepted standards of practice, or the person's ~~individual service~~ individualized services plan;

7. Use of more restrictive or intensive services or denial of services to punish the person or that is not consistent with his ~~individual service~~ individualized services plan.

"Activities of daily living" or "ADLs" means personal care activities and [~~include~~ includes] bathing, dressing, transferring, toileting, grooming, hygiene, feeding, and eating. An individual's degree of independence in performing these activities is part of determining the appropriate level of care and services.

"Admission" means the process of acceptance into a service ~~that includes orientation to service goals, rules and requirements, and assignment to appropriate employees~~ as defined by the provider's policies [.]

"Authorized representative" means a person permitted by law or [~~the Rules and Regulations to Assure Rights of Individuals Receiving Services from Providers Licensed, Funded, or Operated by the Department of Behavioral Health and Developmental Services (~~] 12VAC35-115 [~~)~~] to authorize the disclosure of information or consent to treatment and services or [~~the~~] participation in human research.

"Behavior ~~management~~ intervention" means those principles and methods employed by a provider to help an individual receiving services [to] achieve a positive outcome and to address [~~and correct inappropriate~~] challenging behavior in a constructive and safe manner. Behavior ~~management~~ intervention principles and methods must be employed in accordance with the individualized ~~service~~ services plan and written policies and procedures governing service expectations, treatment goals, safety, and security.

~~"Behavioral treatment" or "positive behavior support program" means any set of documented procedures that are an integral part of the interdisciplinary treatment plan and are developed on the basis of a systemic data collection such as a functional assessment for the purpose of assisting an individual receiving services to achieve any or all of the following: (i) improved behavioral functioning and effectiveness; (ii) alleviation of the symptoms of psychopathology; or (iii) reduction of serious behaviors. A behavioral treatment program can also be referred to as a behavioral treatment plan or behavioral support plan.~~

"Behavioral treatment plan," "functional plan," or "behavioral support plan" means any set of documented procedures that are an integral part of the individualized services plan and are developed on the basis of a systematic data collection, such as a functional assessment, for the purpose of assisting individuals to achieve [the following]:

1. Improved behavioral functioning and effectiveness;

2. Alleviation of symptoms of psychopathology; or

3. Reduction of challenging behaviors.

"Brain injury" means any injury to the brain that occurs after birth, but before age 65, that is acquired through traumatic or nontraumatic insults. Nontraumatic insults may include [~~, but are not limited to,~~] anoxia, hypoxia, aneurysm, toxic

exposure, encephalopathy, surgical interventions, tumor, and stroke. Brain injury does not include hereditary, congenital, or degenerative brain disorders [,] or injuries induced by birth trauma.

[~~"Brain Injury Waiver" means a Virginia Medicaid home and community-based waiver for persons with brain injury approved by the Centers for Medicare and Medicaid Services.~~]

"Care" or "treatment" means ~~a set of individually planned interventions, training, habilitation, or supports that help an individual obtain or maintain an optimal level of functioning, reduce the effects of disability or discomfort, or ameliorate symptoms, undesirable changes or conditions specific to physical, mental, behavioral, cognitive, or social functioning~~ the individually planned [~~, sound, and~~] therapeutic interventions that conform to current acceptable professional practice and that are intended to improve or maintain functioning of an individual receiving services delivered by a provider.

"Case management service" means ~~assisting~~ [services that can include] assistance to individuals and their ~~families to access~~ family members in assessing needed services ~~and supports~~ that are ~~essential to meeting their basic needs identified in their individualized service plan, which include not only accessing needed mental health, mental retardation and substance abuse services, but also any medical, nutritional, social, educational, vocational and employment, housing, economic assistance, transportation, leisure and recreational, legal, and advocacy services and supports that the individual needs to function in a community setting~~ responsive to the person's individual needs. Case management services include: identifying [~~and reaching out to~~] potential users of the service; assessing needs and planning services; linking the individual to services and supports; assisting the individual directly to locate, develop, or obtain needed services and resources; coordinating services with other providers; enhancing community integration; making collateral contacts; monitoring service delivery; discharge planning; and advocating for individuals in response to their changing needs. ~~Maintaining waiting lists for services, case management tracking and periodically contacting individuals for the purpose of determining the potential need for services shall be considered screening and referral and not admission into licensed case management.~~ [~~The term "case~~ "Case] management service" does not include maintaining service waiting lists or periodically contacting or tracking individuals to determine potential service needs.

[~~"Clubhouse service" means the provision of recovery-oriented psychosocial rehabilitation services in a nonresidential setting on a regular basis not less than two hours per day, five days per week, in which clubhouse members and employees work together in the development and implementation of structured activities involved in the day-to-day operation of the clubhouse facilities and in other social and employment opportunities through skills training, peer support, vocational rehabilitation, and community resource development.~~

"Clinical experience" means providing direct services to individuals with mental illness or the provision of direct geriatric services or special education services. Experience may include supervised internships, practicums, and field experience.]

"Commissioner" means the Commissioner of the Department of ~~Mental~~ Behavioral Health~~, Mental Retardation~~ and ~~Substance Abuse Services or his authorized agent~~ Developmental Services.

"Community gero-psychiatric residential services" means 24-hour ~~nonacute~~ care ~~in conjunction with treatment~~ provided to individuals with mental illness, behavioral problems, and concomitant health problems who are usually age 65 or older in a geriatric setting that ~~provides~~ is less intensive ~~services~~ than a psychiatric hospital~~,~~ but more intensive ~~mental health services~~ than a nursing home or group home. ~~Individuals with mental illness, behavioral problems, and concomitant health problems (usually age 65 and older), appropriately treated in a geriatric setting, are provided~~ Services include assessment and individualized services planning by an interdisciplinary services team, intense supervision, psychiatric care, behavioral treatment planning and [~~behavioral~~ behavior] interventions, nursing, and other health related services. ~~An Interdisciplinary Services Team assesses the individual and develops the services plan.~~

"Community intermediate care facility/mental retardation (ICF/MR)" means a ~~service~~ residential facility ~~licensed by the Department of Mental Health, Mental Retardation, and Substance Abuse Services in which care is provided~~ in which care is provided to individuals who have mental retardation (intellectual disability) or a developmental disability ~~due to brain injury~~ [~~who are not in need of nursing care, but~~] who need more intensive training and supervision than may be available in an assisted living facility or group home. Such facilities ~~must~~ shall comply with Title XIX of the Social Security Act standards and federal certification requirements, provide health or rehabilitative services, and provide active treatment to individuals receiving services toward the achievement of a more independent level of functioning or an improved quality of life.

"Complaint" means an allegation ~~brought to the attention of the department that a licensed provider violated~~ of a violation of these regulations or a provider's policies and procedures related to these regulations.

"Co-occurring disorders" means the presence of more than one and often several of the following disorders that are identified independently of one another and are not simply a cluster of symptoms resulting from a single disorder: mental

illness, mental retardation (intellectual disability), or substance [abuse (substance] use [~~disorder~~ disorders)]; brain injury; or developmental disability.

"Co-occurring services" means individually planned [~~, sound, and~~] therapeutic treatment that addresses in an integrated concurrent manner the service needs of individuals who have co-occurring disorders [~~who have an established diagnosis in one domain such as mental illness, mental retardation (intellectual disability), substance abuse disorder, developmental disability, or brain injury and signs or symptoms of an evolving disorder in another domain; or who present acute signs or symptoms of a co-occurring condition~~].

~~"Consumer service plan" or "CSP" means that document addressing all needs of recipients of home and community-based care developmental disability services (IFDDS Waiver), in all life areas. Supporting documentation developed by service providers is to be incorporated in the CSP by the support coordinator. Factors to be considered when these plans are developed may include, but are not limited to, recipient ages, level of functioning, and preferences.~~

"Corrective action plan" means the provider's pledged corrective action in response to ~~noncompliances~~ cited areas of noncompliance documented by the regulatory authority. A corrective action plan must be completed within a specified time.

"Correctional facility" means a facility operated under the management and control of the Virginia Department of Corrections.

[~~"Corporal punishment" means punishment administered through the intentional inflicting of pain or discomfort to the an individual's body (i) through actions such as, but not limited to, striking or hitting the individual with any part of the body or with an implement; (ii) through pinching, pulling or shaking; or (iii) through any similar action that normally inflicts pain or discomfort to the individual.~~]

"Crisis" means a [deteriorating or unstable] situation [often developing suddenly or rapidly] ~~in which an individual presents an immediate danger to self or others or is at risk of serious mental or physical health deterioration~~ that produces [acute, heightened,] emotional, mental, physical, medical, or behavioral distress [~~or challenges~~]; or any situation or circumstance in which the individual perceives or experiences a sudden loss of his ability to use effective problem-solving and coping skills.

"Crisis stabilization" means direct, intensive ~~intervention to individuals who are experiencing serious psychiatric or behavioral problems, or both, that jeopardize their current community living situation. This service shall include temporary intensive services and supports that avert emergency psychiatric hospitalization or institutional placement or prevent out-of-home placement. This service shall be designed to stabilize recipients and strengthen the current living situations so that individuals can be maintained in the community during and beyond the crisis period~~ nonresidential [~~ambulatory~~] or residential direct care and treatment to nonhospitalized individuals experiencing an acute crisis that may jeopardize their current community living situation. Crisis stabilization is intended to avert hospitalization or rehospitalization; provide normative environments with a high assurance of safety and security for crisis intervention; stabilize individuals in crisis; and mobilize the resources of the community support system, family members, and others for ongoing rehabilitation and recovery.

"Day support service" means ~~the provision of individualized planned activities, supports, training, supervision, and transportation to individuals with mental retardation or related conditions, or brain injury, to improve functioning or maintain an optimal level of functioning~~ structured programs of [~~treatment,~~] activity [~~,~~] or training services [for adults with an intellectual disability or a developmental disability,] generally in clusters of two or more continuous hours per day provided to groups or individuals in nonresidential [~~(center based) settings or in the community (noncenter based)~~ community-based] settings. ~~Services may~~ Day support services may provide opportunities for peer interaction and community integration and are designed to enhance the following ~~skills~~: self-care and hygiene, eating, toileting, task learning, community resource utilization, environmental and behavioral skills, social skills, medication management, prevocational skills, and transportation skills. ~~Services provide opportunities for peer interaction and community integration. Services may be provided in a facility (center based) or provided out in the community (noncenter based). Services are provided for two or more consecutive hours per day.~~ The term "day support service" does not include services in which the primary function is to provide ~~extended sheltered or competitive employment, supported or transitional~~ employment-related services, general ~~education~~ educational services, or general recreational services~~, or outpatient services licensed pursuant to this chapter~~.

[~~"Day treatment services" means~~] ~~the provision of coordinated, intensive, comprehensive, and multidisciplinary treatment to individuals through a combination of diagnostic, medical, psychiatric, case management, psychosocial rehabilitation, prevocational and educational services. Services are provided for two or more consecutive hours per day~~ [~~treatment that includes the major diagnostic, medical, psychiatric, psychosocial, and prevocational and educational treatment modalities designed for adults with serious mental illnesses or substance use or co-occurring disorders who require coordinated, intensive, comprehensive, and multidisciplinary treatment that is not provided in outpatient services. Partial hospitalization is a type of day treatment~~

~~service. See definitions of "therapeutic day treatment services for children and adolescents" and "partial hospitalization."~~]

"Department" means the Virginia Department of ~~Mental Health, Mental Retardation~~ Behavioral Health and ~~Substance Abuse~~ Developmental Services.

["Developmental disabilities" means autism or a severe, chronic disability that meets all of the following conditions identified in 42 CFR 435.1009:

1. Attributable to cerebral palsy, epilepsy, or any other condition, other than mental illness, that is found to be closely related to mental retardation (intellectual disability) because this condition results in impairment of general intellectual functioning or adaptive behavior similar to behavior of individuals with mental retardation (intellectual disability) and requires treatment or services similar to those required for these individuals;

2. Manifested before the individual reaches age 18;

3. Likely to continue indefinitely; and

4. Results in substantial functional limitations in three or more of the following areas of major life activity:

a. Self-care;

b. Understanding and use of language;

c. Learning;

d. Mobility;

e. Self-direction; or

f. Capacity for independent living.]

"Discharge" means the process by which the individual's active involvement with a [~~provider~~ service] is terminated by the provider [~~or,~~] individual [, or authorized representative].

"Discharge plan" means the written plan that establishes the criteria for an individual's discharge from a service and identifies and coordinates ~~planning for aftercare~~ delivery of any services needed after discharge.

"Dispense" means to deliver a drug to an ultimate user by or pursuant to the lawful order of a practitioner, including the prescribing and administering, packaging, labeling or compounding necessary to prepare the substance for that delivery. (§ 54.1-3400 et seq. of the Code of Virginia.)

"Emergency service" means ~~mental health, mental retardation or substance abuse services available~~ unscheduled and sometimes scheduled crisis intervention, stabilization, and referral assistance provided over the telephone or face-to-face, if indicated, [available] 24 hours a day and seven days per week ~~that provide crisis intervention, stabilization, and referral assistance over the telephone or face-to-face for individuals seeking services for themselves or others~~. Emergency services also may include walk-ins, home visits, jail interventions, ~~pre-admission screenings,~~ [and] preadmission [~~and~~] ~~other~~ screening activities ~~designed to stabilize an individual within the setting most appropriate to the individual's current condition~~ associated with [~~judicial admission to a state hospital, inpatient or crisis stabilization unit, training center, or other activities associated with~~] the judicial [~~admission~~] process [~~, such as mandatory outpatient treatment orders~~].

"Group home or community residential service" means a congregate ~~residential~~ service providing 24-hour supervision in a community-based [~~, home like dwelling~~ home having eight or fewer residents]. ~~These services are provided for individuals needing assistance~~ Services include supervision, supports, counseling, and training in activities of daily living ~~or~~ for individuals whose [~~service~~ individualized services] plan identifies the need for the specific ~~type~~ types of ~~supervision or counseling~~ services available in this setting. [~~Section 15.2-2291 of the Code of Virginia defines group homes for zoning purposes as having eight or fewer residents.~~]

"Home and noncenter based" means that a service is provided in the individual's home or other noncenter-based setting. This includes [~~but is not limited to~~] noncenter-based day support, supportive in-home, and intensive in-home services.

"IFDDS Waiver" means the Individual and Family Developmental Disabilities Support Waiver.

"Individual" or "individual receiving services" means a person receiving ~~care or treatment or other~~ services ~~from a provider~~ that are licensed under this chapter whether that person is referred to as a patient, consumer, client, resident, student, individual, recipient, family member, relative, or other term. When the term is used, the requirement applies to every individual receiving [licensed] services [~~of~~ from] the provider.

"Individualized services plan" or "ISP" means a comprehensive and regularly updated written plan ~~of action to meet the needs and preferences of an individual~~ that describes the individual's needs, the measurable goals and objectives to address those needs, and strategies to reach the individual's goals. An ISP is person-centered, empowers the individual, and is designed to meet the needs and preferences of the individual. The ISP is developed through a partnership between the individual and the provider and includes an individual's treatment plan, habilitation plan, person-centered plan, or plan of care [, which are all considered individualized service plans].

"Initial assessment" means an assessment conducted prior to or at admission to determine whether the individual meets the service's admission criteria; what the individual's immediate

service, health, and safety needs are; and whether the provider has the capability and staffing to provide the needed services.

"Inpatient psychiatric service" means ~~a~~ intensive 24-hour ~~intensive~~ medical, nursing ~~care,~~ and treatment services provided ~~for~~ to individuals with mental [illness ~~illnesses~~] or ~~problems with~~ substance [abuse (substance] use disorders [ )] in a hospital as defined in § 32.1-123 of the Code of Virginia or in a special unit of such a hospital.

"Instrumental activities of daily living" or "IADLs" means meal preparation, housekeeping, laundry, and managing money. A person's degree of independence in performing these activities is part of determining appropriate level of care and services.

"Intensive Community Treatment (ICT) service" means a self-contained interdisciplinary team of at least five full-time equivalent clinical staff, a program assistant, and a full-time psychiatrist that:

1. Assumes responsibility for directly providing needed treatment, rehabilitation, and support services to identified individuals with severe and persistent mental [~~illnesses~~ illness] especially those who have severe symptoms that are not effectively remedied by available treatments or who because of reasons related to their mental illness resist or avoid involvement with mental health services;

2. Minimally refers individuals to outside service providers;

3. Provides services on a long-term care basis with continuity of caregivers over time;

4. Delivers 75% or more of the services outside program offices; and

5. Emphasizes outreach, relationship building, and individualization of services.

~~The individuals to be served by ICT are individuals who have severe symptoms and impairments not effectively remedied by available treatments or who, because of reasons related to their mental illness, resist or avoid involvement with mental health services.~~

"Intensive in-home service" means family preservation interventions for children and adolescents who have or are at-risk of serious emotional disturbance, including ~~such~~ individuals who also have a diagnosis of mental retardation (intellectual disability). ~~Services are~~ Intensive in-home service is usually time-limited and is provided typically in the residence of an individual who is at risk of being moved to out-of-home placement or who is being transitioned back home from an out-of-home placement. ~~These services include~~ The service includes 24-hour per day emergency response; crisis treatment; individual and family counseling; life, parenting, and communication skills; and case management ~~activities~~ and coordination with other services~~; and emergency response~~.

[~~"Intensive outpatient service" means treatment provided in a concentrated manner~~] ~~(involving multiple outpatient visits per week)~~ [~~over a period of time for individuals requiring intensive outpatient stabilization.~~] ~~These services usually~~ [~~Intensive outpatient services include multiple group therapy sessions during the week, individual and family therapy, individual monitoring, and case management.~~]

"Investigation" means a detailed inquiry or systematic examination of the operations of a provider or its services regarding [~~a~~ an alleged] violation of regulations or law. An investigation may be undertaken as a result of a complaint, an incident report [,] or other information that comes to the attention of the department.

~~"Legally authorized representative" means a person permitted by law to give informed consent for disclosure of information and give informed consent to treatment, including medical treatment, and participation in human research for an individual who lacks the mental capacity to make these decisions.~~

"Licensed mental health professional (LMHP)" means a physician, licensed clinical psychologist, licensed professional counselor, licensed clinical social worker, licensed substance abuse treatment practitioner, licensed marriage and family [~~counselor~~ therapist], or ~~certification as a~~ certified psychiatric clinical nurse specialist.

"Location" means a place where services are or could be provided.

[~~"Managed~~ "Medically managed] withdrawal services" means detoxification services to eliminate or reduce the effects of alcohol or other drugs in the individual's body.

"Mandatory outpatient treatment order" means an order issued by [~~the~~ a] court pursuant to § 37.2-817 [~~D~~] of the Code of Virginia.

"Medical detoxification" means a service provided in a hospital or other 24-hour care facility [;] under the supervision of medical personnel using medication to systematically eliminate or reduce effects of alcohol or other drugs in the individual's body.

"Medical evaluation" means the process of assessing an individual's health status that includes a medical history and a physical examination of an individual conducted by a licensed medical practitioner operating within the scope of his license.

"Medication" means prescribed or over-the-counter drugs or both.

"Medication administration" means the direct application of medications by injection, inhalation, [~~or~~] ingestion [,] or any other means to an individual receiving services by (i)

persons legally permitted to administer medications or (ii) the individual at the direction and in the presence of persons legally permitted to administer medications.

["Medication assisted treatment (Opioid treatment service)" means an intervention strategy that combines outpatient treatment with the administering or dispensing of synthetic narcotics, such as methadone or buprenorphine (suboxone), approved by the federal Food and Drug Administration for the purpose of replacing the use of and reducing the craving for opioid substances, such as heroin or other narcotic drugs.]

"Medication error" means ~~that~~ an error ~~has been made~~ in administering a medication to an individual [and includes] when any of the following occur: (i) the wrong medication is given to an individual [, ~~such as~~] (ii) the wrong individual is given the medication, (iii) the wrong dosage is given to an individual, (iv) medication is given to an individual at the wrong time or not at all, or (v) the [~~proper~~ wrong] method is [~~not~~] used to give the medication to the individual.

"Medication storage" means any area where medications are maintained by the provider, including a locked cabinet, locked room, or locked box.

"Mental Health Community Support Service (MHCSS)" means the provision of recovery-oriented [~~psychosocial rehabilitation~~] services to individuals with long-term, severe [~~psychiatric disabilities~~ mental illness] ~~including~~. MHCSS [~~include~~ includes] skills training and assistance in accessing and effectively utilizing services and supports that are essential to meeting the needs identified in ~~their~~ the individualized ~~service~~ services plan and development of environmental supports necessary to sustain active community living as independently as possible. MHCSS ~~Services are~~ may be provided in any setting in which the individual's needs can be addressed, skills training applied, and recovery experienced.

"Mental illness" means a disorder of thought, mood, emotion, perception, or orientation that significantly impairs judgment, behavior, capacity to recognize reality, or ability to address basic life necessities and requires care and treatment for the health, safety, or recovery of the individual or for the safety of others.

"Mental retardation (intellectual disability)" means ~~substantial~~ a disability originating before the age of 18 years characterized concurrently by (i) significantly subaverage ~~general~~ intellectual functioning as demonstrated by performance on a standardized measure of intellectual functioning administered in conformity with accepted professional practice that is at least two standard deviations below the mean; and (ii) ~~that originates during the development period and is associated with impairment~~ significant limitations in adaptive behavior as expressed in conceptual, social, and practical adaptive skills (§ 37.2-100 of the Code of Virginia). ~~It exists concurrently with related limitations in two or more of the following applicable adaptive skill areas: communication, self-care, home living, social skills, community use, self-direction, health and safety, functional academics, leisure, and work.~~ [~~According to the American Association on Intellectual and Developmental Disabilities (AAIDD) definition, these impairments should be assessed in the context of the individual's environment, considering cultural and linguistic diversity as well as differences in communication and sensory motor and behavioral factors. Within an individual, limitations often coexist with strengths. The purpose of describing limitations is to develop a profile of needed supports. With personalized supports over a sustained period, the functioning of an individual will improve. In some organizations, the term "intellectual disability" is used instead of "mental retardation."~~]

~~"Mentally ill" means any person afflicted with mental disease to such an extent that for his own welfare or the welfare of others he requires care and treatment, or with mental disorder or functioning classifiable under the diagnostic criteria from the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association, Fourth Edition, 1994, that affects the well being or behavior of an individual.~~

"Neglect" means the failure by an individual or ~~provider responsible for providing services to provide nourishment, treatment, care, goods, or services necessary to the health, safety or welfare of a person receiving care or treatment for mental illness, mental retardation or substance abuse (§ 37.2-100 of the Code of Virginia). This definition of neglect also applies to individuals receiving in-home support, crisis stabilization, and day support under the IFDDS or Brain Injury Waiver and individuals receiving residential brain injury services~~ a program or facility operated, licensed, or funded by the department, excluding those operated by the Department of Corrections, responsible for providing services to do so, including nourishment, treatment, care, goods, or services necessary to the health, safety, or welfare of a person receiving care or treatment for mental illness, mental retardation (intellectual disability), or substance abuse [(substance use disorders)].

"Neurobehavioral services" means the assessment, evaluation, and treatment of cognitive, perceptual, behavioral, and other impairments caused by brain injury that affect an individual's ability to function successfully in the community.

[~~"Opioid treatment service" means an intervention strategy that combines treatment with the administering or dispensing of opioid agonist treatment medication. An individual-specific, physician-ordered dose of medication is administered or dispensed either for detoxification or maintenance treatment.~~]

"Outpatient service" means ~~a variety of~~ treatment ~~interventions generally~~ provided to individuals~~, groups or~~

~~families~~ on an hourly schedule, on an individual, group, or family basis, and usually in a clinic or similar facility or in another location. Outpatient services may include~~, but are not limited to, emergency services, crisis intervention services, diagnosis and evaluation, intake and screening, counseling, psychotherapy, behavior management, psychological testing and assessment, chemotherapy and medication management services, and jail based services~~ diagnosis and evaluation, screening and intake, counseling, psychotherapy, behavior management, psychological testing and assessment, laboratory and other ancillary services, medical services, [and] medication services [~~, and, jail and detention based services~~]. "Outpatient service" specifically includes:

1. Services operated by a community services board [or a behavioral health authority] established pursuant to Chapter 5 (§ 37.2-500 et seq.) [or Chapter 6 (§ 37.2-600 et seq.)] of Title 37.2 of the Code of Virginia;

2. Services [~~funded wholly or in part, directly or indirectly,~~ contracted] by a community services board or a behavioral health authority established pursuant to Chapter 5 (§ 37.2-500 et seq.) or Chapter 6 (§ 37.2-600 et seq.) of Title 37.2 of the Code of Virginia; or

3. Services that are owned, operated, or controlled by a corporation organized pursuant to the provisions of either Chapter 9 (§ 13.1-601 et seq.) or Chapter 10 (§ 13.1-801 et seq.) of Title 13.1 of the Code of Virginia.

"Partial hospitalization service" means [~~the provision within a medically supervised setting of day treatment services that are~~] time-limited active treatment interventions [~~,~~ that are] more intensive than outpatient services, designed to stabilize and ameliorate acute symptoms, and serve as an alternative to inpatient hospitalization or to reduce the length of a hospital stay. Partial hospitalization is focused on individuals [with serious mental illness, substance abuse (substance use disorders), or co-occurring disorders] at risk of hospitalization or who have been recently discharged from an inpatient setting.

"Person-centered" means focusing on the needs and preferences of the individual; empowering and supporting the individual in defining the direction for his life; and promoting self-determination, community involvement, and recovery.

[~~"Plan of care" means a document addressing all needs of recipients of home and community based care developmental disability services (IFDDS Waiver) in all life areas. It includes supporting documentation developed by service providers. Factors considered in developing this plan may include recipient ages, level of functioning, and preferences.~~]

"Program of Assertive Community Treatment (PACT) service" means a self-contained interdisciplinary team of at least 10 full-time equivalent clinical staff, a program assistant, and a full- or part-time psychiatrist that:

1. Assumes responsibility for directly providing needed treatment, rehabilitation, and support services to identified individuals with severe and persistent mental illnesses~~;~~, [~~especially~~ including] those who have severe symptoms that are not effectively remedied by available treatments or who because of reasons related to their mental illness resist or avoid involvement with mental health services;

2. Minimally refers individuals to outside service providers;

3. Provides services on a long-term care basis with continuity of caregivers over time;

4. Delivers 75% or more of the services outside program offices; and

5. Emphasizes outreach, relationship building, and individualization of services.

~~The individuals to be served by PACT are individuals who have severe symptoms and impairments not effectively remedied by available treatments or who, because of reasons related to their mental illness, resist or avoid involvement with mental health services.~~

"Provider" means any person, entity [,] or organization, excluding an agency of the federal government by whatever name or designation, that delivers (i) services to [~~persons~~ individuals] with mental illness, mental retardation (intellectual disability), or substance abuse [(substance use disorders)]~~;~~, (ii) services to [~~persons~~ individuals] who receive day support, in-home support, or crisis stabilization services funded through the IFDDS Waiver~~;~~, [~~(iii) services to persons under the Brain Injury Waiver;~~] or [~~(iv)~~ (iii)] residential services for [~~persons~~ individuals] with brain injury. The person, entity [,] or organization shall include a hospital as defined in § 32.1-123 of the Code of Virginia, community services board, behavioral health authority, private provider, and any other similar or related person, entity [,] or organization. It shall not include any individual practitioner who holds a license issued by a health regulatory board of the Department of Health Professions or who is exempt from licensing pursuant to §§ 54.1-2901, 54.1-3001, 54.1-3501, 54.1-3601 and 54.1-3701 of the Code of Virginia.

"Psychosocial rehabilitation [service]" means [a program of two or more consecutive hours per day provided to groups of adults in a nonresidential setting. Individuals must demonstrate a clinical need for the service arising from a condition due to mental, behavioral, or emotional illness that results in significant functional impairments in major life activities. This service provides education to teach the individual about mental illness, substance abuse, and appropriate medication to avoid complication and relapse and opportunities to learn and use independent skills and to enhance social and interpersonal skills within a consistent program structure and environment.] ~~care or treatment for individuals with long-term, severe psychiatric disabilities,~~

~~which is designed to improve their quality of life by assisting them to assume responsibility over their lives and to function as actively and independently in society as possible, through the strengthening of individual skills and the development of environmental supports necessary to sustain community living~~ [~~the process of providing assessment, medication education, opportunities to learn and use independent living skills and enhance social and interpersonal skills, opportunities for vocational and other education, family support and education, and advocacy in a supportive community environment focusing on normalization. It emphasizes strengthening the individual's ability to deal with everyday life rather than focusing on the treatment of pathological conditions.~~] Psychosocial rehabilitation includes skills training, peer support, vocational rehabilitation, and community resource development oriented toward empowerment, recovery, and competency.

~~"Qualified Brain Injury Professional (QBIP)" means a clinician in the health professions who is trained and experienced in providing brain injury services to individuals who have a brain injury diagnosis including a (i) physician: a doctor of medicine or osteopathy; (ii) psychiatrist: a doctor of medicine or osteopathy, specializing in psychiatry and licensed in Virginia; (iii) psychologist: a person with a master's degree in psychology from a college or university with at least one year of clinical experience; (iv) social worker: a person with at least a bachelor's degree in human services or related field (social work, psychology, psychiatric rehabilitation, sociology, counseling, vocational rehabilitation, human services counseling, or other degree deemed equivalent to those described) from an accredited college, with at least two years of clinical experience providing direct services to individuals with a diagnosis of brain injury; (v) certified brain injury specialist; (vi) registered nurse licensed in Virginia with at least one year of clinical experience; or (vii) any other licensed rehabilitation professional with one year of clinical experience.~~

~~"Qualified Developmental Disabilities Professional (QDDP)" means an individual possessing at least one year of documented experience working directly with individuals who have related conditions and is one of the following: a doctor of medicine or osteopathy, a registered nurse, or an individual holding at least a bachelor's degree in a human service field including, but not limited to, sociology, social work, special education, rehabilitation counseling, or psychology.~~

"Qualified Mental Health [~~Professional (QMHP)"~~ Professional-Adult (QMHP-A)"] means ~~a clinician in the health professions~~ a person [~~working in a PACT or ICT~~ in the human services field] who is trained and experienced in providing psychiatric or mental health services to individuals who have a [~~psychiatric diagnosis~~ mental illness]; including [~~a~~] (i) [~~physician:~~] a doctor of medicine or osteopathy [licensed in Virginia]; (ii) [~~psychiatrist:~~] a doctor of medicine or osteopathy, specializing in psychiatry and licensed in Virginia; (iii) [~~psychologist:~~] an individual with a master's degree in psychology from [~~a~~ an accredited] college or university with at least one year of clinical experience; (iv) [a] social worker: an individual with at least a bachelor's degree in human services or related field (social work, psychology, psychiatric rehabilitation, sociology, counseling, vocational rehabilitation, human services counseling or other degree deemed equivalent to those described) from an accredited college and with at least one year of clinical experience providing direct services to [~~persons~~ individuals] with a diagnosis of mental illness; (v) [~~Registered~~ a person with at least a bachelor's degree from an accredited college in an unrelated field that includes at least 15 semester credits (or equivalent) in a human services field and who has at least three years of clinical experience; (vi) a Certified] Psychiatric Rehabilitation Provider [~~(RPRP)~~ (CPRP)] registered with the ~~International Association of Psychosocial Rehabilitation Services (IAPSRS)~~ United States Psychiatric Rehabilitation Association (USPRA); [~~(vi)~~ (vii) a] registered nurse licensed in ~~the Commonwealth of~~ Virginia with at least one year of clinical experience; or [~~(vii)~~ (viii)] any other licensed mental health professional.

["Qualified Mental Health Professional-Child (QMHP-C)" means a person in the human services field who is trained and experienced in providing psychiatric or mental health services to children who have a mental illness. To qualify as a QMHP-C, the individual must have the designated clinical experience and must either (i) be a doctor of medicine or osteopathy licensed in Virginia; (ii) have a master's degree in psychology from an accredited college or university with at least one year of clinical experience with children and adolescents; (iii) have a social work bachelor's or master's degree from an accredited college or university with at least one year of documented clinical experience with children or adolescents; (iv) be a registered nurse with at least one year of clinical experience with children and adolescents; (v) have at least a bachelor's degree in a human services field or in special education from an accredited college with at least one year of clinical experience with children and adolescents, or (vi) be a licensed mental health professional.

"Qualified Mental Health Professional-Eligible (QMHP-E)" means a person who has: (i) at least a bachelor's degree in a human service field or special education from an accredited college without one year of clinical experience or (ii) at least a bachelor's degree in a nonrelated field and is enrolled in a master's or doctoral clinical program, taking the equivalent of at least three credit hours per semester and is employed by a provider that has a triennial license issued by the department and has a department and DMAS-approved supervision training program.

"Qualified Mental Retardation Professional (QMRP)" means a person who possesses at least one year of documented experience working directly with individuals who have

mental retardation (intellectual disability) or other developmental disabilities and one of the following credentials: (i) a doctor of medicine or osteopathy licensed in Virginia, (ii) a registered nurse licensed in Virginia, or (iii) completion of at least a bachelor's degree in a human services field, including, but not limited to sociology, social work, special education, rehabilitation counseling, or psychology.]

~~"Qualified Mental Retardation Professional (QMRP)" means an individual possessing at least one year of documented experience working directly with individuals who have mental retardation or other developmental disabilities and is one of the following: a doctor of medicine or osteopathy, a registered nurse, or holds at least a bachelor's degree in a human services field including, but not limited to, sociology, social work, special education, rehabilitation counseling, and psychology.~~

~~"Qualified Paraprofessional in Brain Injury (QPPBI)" means an individual with at least a high school diploma and two years experience working with individuals with disabilities.~~

"Qualified Paraprofessional in Mental Health (QPPMH)" means ~~an individual~~ a person who must, at a minimum, meet one of the following criteria: (i) registered with the [~~International Association of Psychosocial Rehabilitation Services (IAPSRS)~~ United States Psychiatric Association (USPRA)] as an Associate Psychiatric Rehabilitation Provider (APRP); (ii) [has] an [~~Associate's Degree~~ associate's degree] in a related field (social work, psychology, psychiatric rehabilitation, sociology, counseling, vocational rehabilitation, human services counseling) and at least one year of experience providing direct services to [~~persons~~ individuals] with a diagnosis of mental illness; or (iii) [has] a minimum of 90 hours classroom training and 12 weeks of experience under the direct personal supervision of a [~~QMHP~~ QMHP-Adult] providing services to [~~persons~~ individuals] with mental illness and at least one year of experience (including the 12 weeks of supervised experience).

"Recovery" means a journey of healing and transformation enabling an individual with a mental illness to live a meaningful life in a community of his choice while striving to achieve his full potential. For individuals with substance [abuse (substance] use disorders [ )], recovery is an incremental process leading to positive social change and a full return to biological, psychological, and social functioning. For individuals with mental retardation (intellectual disability), the concept of recovery does not apply in the sense that [~~persons~~ individuals] with mental retardation (intellectual disability) will need supports throughout their entire [~~life~~ lives] although these may change over time. With supports, individuals with mental retardation (intellectual disability) are capable of living lives that are fulfilling and satisfying and that bring meaning to themselves and others [~~that~~ whom] they know.

"Referral" means the process of directing an applicant or an individual to a provider or service that is designed to provide the assistance needed.

[~~"Related conditions" or "developmental disabilities" means autism or a severe, chronic disability that meets all of the following conditions identified in 42 CFR 435.1009:~~

~~1. Attributable to cerebral palsy, epilepsy or any other condition, other than mental illness, that is found to be closely related to mental retardation (intellectual disability) because this condition results in impairment of general intellectual functioning or adaptive behavior similar to behavior of persons with mental retardation (intellectual disability) ,and requires treatment or services similar to those required for these persons;~~

~~2. Manifested before the person reaches age 22;~~

~~3. Likely to continue indefinitely; and~~

~~4. Results in substantial functional limitations in three or more of the following areas of major life activity:~~

~~a. Self-care;~~

~~b. Understanding and use of language;~~

~~c. Learning;~~

~~d. Mobility;~~

~~e. Self-direction; or~~

~~f. Capacity for independent living.~~]

"Residential crisis stabilization service" means (i) providing short-term, intensive treatment to [nonhospitalized] individuals who require multidisciplinary treatment in order to stabilize acute psychiatric symptoms and prevent admission to a psychiatric inpatient unit; (ii) providing normative environments with a high assurance of safety and security for crisis intervention; and (iii) mobilizing the resources of the community support system, family members, and others for ongoing rehabilitation and recovery.

"Residential service" means ~~a category of service~~ providing 24-hour ~~care~~ support in conjunction with care and treatment or a training program in a setting other than a hospital or training center. Residential services provide a range of living arrangements from highly structured and intensively supervised to relatively independent requiring a modest amount of staff support and monitoring. Residential services include~~, but are not limited to:~~ residential treatment, group or community homes, supervised living, residential crisis stabilization, community gero-psychiatric residential, community intermediate care facility-MR, sponsored residential homes, medical and social detoxification, neurobehavioral services, and substance abuse residential treatment for women and children.

"Residential treatment service" means providing an intensive and highly structured mental health, substance abuse, or neurobehavioral service, or services for co-occurring disorders in a residential setting, other than an inpatient service.

"Respite care service" means providing for a short-term, time limited period of care of an individual for the purpose of providing relief to the individual's family, guardian, or regular care giver. [~~Individuals~~ Persons] providing respite care are recruited, trained, and supervised by a licensed provider. These services may be provided in a variety of settings including residential, day support, in-home, or [~~in~~] a sponsored residential home.

"Restraint" means the use of ~~an approved~~ a mechanical device, medication, physical intervention, or hands-on hold~~, or pharmacologic agent~~ to ~~involuntarily~~ prevent an individual receiving services from moving his body to engage in a behavior that places him or others at imminent risk. ~~This term includes restraints used for behavioral, medical, or protective purposes.~~ There are three kinds of restraints:

~~1. A restraint used for "behavioral" purposes means the use of an approved physical hold, a psychotropic medication, or a mechanical device that is used for the purpose of controlling behavior or involuntarily restricting the freedom of movement of the individual in an instance in which there is an imminent risk of an individual harming himself or others, including staff; when nonphysical interventions are not viable; and safety issues require an immediate response.~~

~~2. A restraint used for "medical" purposes means the use of an approved mechanical or physical hold to limit the mobility of the individual for medical, diagnostic, or surgical purposes and the related post-procedure care processes, when the use of such a device is not a standard practice for the individual's condition.~~

~~3. A restraint used for "protective" purposes means the use of a mechanical device to compensate for a physical deficit, when the individual does not have the option to remove the device. The device may limit an individual's movement and prevent possible harm to the individual (e.g., bed rail or gerichair) or it may create a passive barrier to protect the individual (e.g., helmet).~~

~~4. A "mechanical restraint" means the use of an approved mechanical device that involuntarily restricts the freedom of movement or voluntary functioning of a limb or a portion of a person's body as a means to control his physical activities, and the individual receiving services does not have the ability to remove the device.~~

~~5. A "pharmacological restraint" means a drug that is given involuntarily for the emergency control of behavior when it is not standard treatment for the individual's medical or psychiatric condition.~~

~~6. A "physical restraint" (also referred to "manual hold") means the use of approved physical interventions or "hands on" holds to prevent an individual from moving his body to engage in a behavior that places him or others at risk of physical harm. Physical restraint does not include the use of "hands on" approaches that occur for extremely brief periods of time and never exceed more than a few seconds duration and are used for the following purposes: (i) to intervene in or redirect a potentially dangerous encounter in which the individual may voluntarily move away from the situation or hands on approach or (ii) to quickly de escalate a dangerous situation that could cause harm to the individual or others.~~

1. Mechanical restraint means the use of a mechanical device that cannot be removed by the individual to restrict the individual's freedom of movement or functioning of a limb or portion of an individual's body when that behavior places him or others at imminent risk.

2. Pharmacological restraint means the use of a medication that is administered involuntarily for the emergency control of an individual's behavior when that individual's behavior places him or others at imminent risk and the administered medication is not a standard treatment for the individual's medical or psychiatric condition.

3. Physical restraint, also referred to as manual hold, means the use of a physical intervention or hands-on hold to prevent an individual from moving his body when that individual's behavior places him or others at imminent risk.

"Restraints for behavioral purposes" means using a physical hold, medication, or a mechanical device to control behavior or involuntary restrict the freedom of movement of an individual in an instance when all of the following conditions are met: (i) there is an emergency; (ii) nonphysical interventions are not viable; and (iii) safety issues require an immediate response.

"Restraints for medical purposes" means using a physical hold, medication, or mechanical device to limit the mobility of an individual for medical, diagnostic, or surgical purposes, such as routine dental care or radiological procedures and related post-procedure care processes, when use of the restraint is not the accepted clinical practice for treating the individual's condition.

"Restraints for protective purposes" means using a mechanical device to compensate for a physical or cognitive deficit when the individual does not have the option to remove the device. The device may limit an individual's movement, for example, bed rails or a gerichair, and prevent possible harm to the individual or it may create a passive barrier, such as a helmet to protect the individual.

"Restriction" means anything that limits or prevents an individual from freely exercising his rights and privileges.

"Screening" means the ~~preliminary assessment of an individual's appropriateness for admission or readmission to a service~~ process or procedure for determining whether the individual meets the minimum criteria for admission.

"Seclusion" means the involuntary placement of an individual ~~receiving services~~ alone~~,~~ in ~~a locked room or secured area from which he is physically prevented from leaving~~ an area secured by a door that is locked or held shut by a staff person [,] by physically blocking the door, or by any other physical [~~or verbal~~] means so that the individual cannot leave it.

"Serious injury" means any injury resulting in bodily [~~hurt,~~] damage, harm [,] or loss that requires medical attention by a licensed physician, doctor of osteopathic medicine, physician assistant, or nurse practitioner while the individual is supervised by or involved in services [~~; or injuries related to the individual's diagnosis wherever they occur~~], such as [~~,~~] attempted suicides, medication overdoses, [or] reactions from medications administered or prescribed by the service [~~, and when the injuries require medical attention by a licensed physician, doctor of osteopathic medicine, physician assistant, or nurse practitioner~~].

"Service" or "services" means (i) planned individualized interventions intended to reduce or ameliorate mental illness, mental retardation (intellectual disability), or substance abuse [(substance use disorders)] through care, treatment, training, habilitation, or other supports that are delivered by a provider to individuals with mental illness, mental retardation (intellectual disability), or substance abuse [(substance use disorders)]. Services include outpatient services, intensive in-home services, opioid treatment services, inpatient psychiatric hospitalization, community gero-psychiatric residential services, assertive community treatment and other clinical services; day support, day treatment, partial hospitalization, psychosocial rehabilitation, and habilitation services; case management services; and supportive residential, [~~special school,~~] halfway house, and other residential services; (ii) day support, in [-] home support, and crisis stabilization services provided to individuals under the IFDDS Waiver; and (iii) planned individualized interventions intended to reduce or ameliorate the effects of brain injury through care, treatment, or other supports [~~provided under the Brain Injury Waiver~~] or in residential services for persons with brain injury.

"Shall" means an obligation to act is imposed.

"Shall not" means an obligation not to act is imposed.

"Skills training" means systematic skill building through curriculum-based psychoeducational and cognitive-behavioral interventions. These interventions break down complex objectives for role performance into simpler components, including basic cognitive skills such as attention, to facilitate learning and competency.

"Social detoxification service" means providing nonmedical supervised care for the individual's natural process of withdrawal from [~~excessive~~] use of alcohol or other drugs.

"Sponsored residential home" means a service where providers arrange for, supervise [,] and provide programmatic, financial, and service support to families or ~~individuals~~ persons (sponsors) providing care or treatment in their own homes for [~~adults~~ individuals receiving services].

"State board" means the State Board of Behavioral Health and Developmental Services. The board has statutory responsibility for adopting regulations that may be necessary to carry out the provisions of Title 37.2 of the Code of Virginia and other laws of the Commonwealth administered by the commissioner or the department.

"State methadone authority" means the [Virginia Department of ~~Mental~~ [Behavioral] Health~~, Mental Retardation and Substance Abuse Services~~ [~~department~~ and Developmental Services] that is authorized by the federal Center for Substance Abuse Treatment to exercise the responsibility and authority for governing the treatment of opiate addiction with an opioid drug. ~~This is the agency designated by the Governor to exercise the responsibility and authority for governing the treatment of opiate addiction with an opioid drug.~~

"Substance abuse [~~" or "~~ ( ] substance use [~~disorder)~~ disorders)]" means the use~~,~~ of drugs enumerated in the Virginia Drug Control Act (§ 54.1-3400 et seq.) without a compelling medical reason~~, of~~ or alcohol ~~and other drugs which~~ that (i) results in psychological or physiological ~~dependency~~ dependence or danger to self or others as a function of continued and compulsive use ~~in such a manner as to induce~~ or (ii) results in mental, emotional [,] or physical impairment ~~and cause~~ that causes socially dysfunctional or socially disordering behavior; and (iii) [,] because of such substance abuse [,] requires care and treatment for the health of the individual. This care and treatment may include counseling, rehabilitation, or medical or psychiatric care.

["Substance abuse intensive outpatient service" means treatment provided in a concentrated manner for two or more consecutive hours per day to groups of individuals in a nonresidential setting. This service is provided over a period of time for individuals requiring more intensive services than an outpatient service can provide. Substance abuse intensive outpatient services include multiple group therapy sessions during the week, individual and family therapy, individual monitoring, and case management.]

"Substance abuse residential treatment for women with children service" means a 24-hour residential service providing an intensive and highly structured substance abuse service for women with children who live in the same facility.

"Supervised living residential service" means the provision of significant direct supervision and community support services to individuals living in apartments or other residential settings. These services differ from supportive in-home service because the provider assumes responsibility for management of the physical environment of the residence, and staff supervision and monitoring are daily and available on a 24-hour basis. Services are provided based on the needs of the individual in areas such as food preparation, housekeeping, medication administration, personal hygiene, [treatment, counseling,] and budgeting.

"Supportive in-home service" (formerly supportive residential) means the provision of community support services and other structured services to assist individuals~~. Services~~, to strengthen individual skills, and [~~to~~ that] provide environmental supports necessary to attain and sustain independent community residential living. ~~They~~ Services include~~, but are not limited to,~~ drop-in or friendly-visitor support and counseling to more intensive support, monitoring, training, in-home support, respite care, and family support services. Services are based on the needs of the individual and include training and assistance. These services normally do not involve overnight care by the provider; however, due to the flexible nature of these services, overnight care may be provided on an occasional basis.

[~~"Systemic corrective action" means the provider's plans to address any cited violation of these regulations that will significantly reduce the probability that the violation will re-occur.~~]

"Therapeutic day treatment for children and adolescents" means a treatment program that serves (i) children and adolescents from birth through age 17 [and under certain circumstances up to 21] with serious emotional disturbances, substance use, or co-occurring disorders or (ii) children from birth through age seven who are at risk of serious emotional disturbance, in order to combine psychotherapeutic interventions with education and mental health or substance abuse treatment. Services include: evaluation; medication education and management; opportunities to learn and use daily living skills and to enhance social and interpersonal skills; and individual, group, and family counseling.

"Time out" means ~~assisting an individual to regain emotional control by removing the individual from his immediate environment to a different, open location until he is calm or the problem behavior has subsided~~ the involuntary removal of an individual by a staff person from a source of reinforcement to a different, open location for a specified period of time or until the problem behavior has subsided to discontinue or reduce the frequency of problematic behavior.

"Volunteer" means a person who, without financial remuneration, provides services to individuals on behalf of the provider.

Part II
Licensing Process

12VAC35-105-30. Licenses.

A. Licenses are issued to providers who offer services to ~~one or a combination of the following disability groups: persons with~~ individuals who have mental illness, ~~persons with~~ mental retardation (intellectual disability), ~~persons with~~ or substance ~~addiction or~~ [abuse] ~~problems; persons with related conditions~~ [(substance] use [~~disorder)~~ disorders)]; have developmental disability and are served under the IFDDS Waiver~~,~~; or ~~persons with~~ have brain injury and are [receiving ~~served~~ ~~in~~] residential [services ~~settings or under the Brain Injury Waiver~~] ~~or in a residential service~~.

B. Providers shall be licensed to provide specific services as defined in this chapter or as determined by the commissioner. These services include:

1. Case management;

~~2. Clubhouse;~~

~~3.~~ 2. Community gero-psychiatric residential;

~~4.~~ 3. Community intermediate care facility-MR;

~~5. Crisis~~ 4. Residential crisis stabilization ~~(residential and nonresidential)~~;

5. Nonresidential crisis stabilization;

6. Day support;

7. Day treatment, includes [~~club house and~~] therapeutic day treatment for children and adolescents;

8. Group home and community residential;

9. Inpatient psychiatric;

10. Intensive Community Treatment (ICT);

11. Intensive in-home;

[~~12. Intensive outpatient;~~

~~13.~~ 12.] ~~Medical detoxification~~ Managed withdrawal, including medical detoxification and social detoxification;

[~~14.~~ 13.] Mental health community support;

[~~15.~~ 14.] Opioid treatment [/medication assisted treatment];

[~~16.~~ 15.] Emergency;

[16. ~~17.~~] Outpatient;

[17. ~~18.~~] Partial hospitalization;

[18. ~~19.~~] Program of assertive community treatment (PACT);

[19. ~~20.~~] Psychosocial rehabilitation;

[20. ~~21.~~] Residential treatment;

[21. ~~22.~~] Respite care;

~~22. Social detoxification;~~

[~~23.~~ 22.] Sponsored residential home;

[~~24.~~ 23.] Substance abuse residential treatment for women with children;

[24. Substance abuse intensive outpatient;]

25. Supervised living residential; and

26. Supportive in-home.

C. A license addendum ~~describes~~ shall describe the services licensed, the ~~population~~ disabilities of individuals who may be served, the specific locations where services are to be provided or ~~organized~~ administered, and the terms~~,~~ and conditions for each service offered by a licensed provider. For residential and inpatient services, the license identifies the number of ~~beds~~ individuals each residential location may serve at a given time.

12VAC35-105-40. Application requirements.

A. All providers that are not currently licensed shall be required to apply for a license using the application designated by the commissioner. Providers applying for a license ~~must~~ shall submit:

1. A working budget showing projected revenue and expenses for the first year of operation, including a revenue plan.

2. Documentation of working capital to include:

a. Funds or a line of credit sufficient to cover at least 90 days of operating expenses if the provider is a corporation, unincorporated organization or association, a sole proprietor, or a partnership.

b. Appropriated revenue if the provider is a state or local government agency, board or commission.

3. Documentation of authority to conduct business in the Commonwealth of Virginia.

4. A disclosure statement identifying the legal names and dates of any services licensed [~~to~~ in Virginia or other states that] the applicant [~~in other states or in Virginia~~ holds or has held], previous sanctions or negative actions against any license to provide services that the applicant holds or has held in any other state or in Virginia, [and] the names and dates of any disciplinary actions involving the applicant's current or past licensed services [~~, and any criminal convictions and conviction dates involving the applicant.owners of the organization~~].

B. Providers ~~must~~ shall submit an application listing each service to be provided and submit the following items for each service:

1. A staffing plan;

2. Employee credentials ~~or~~ and job descriptions containing all the elements outlined in 12VAC35-105-410 A;

3. A service description containing all the elements outlined in 12VAC35-105-580 C; and

4. Records management policy containing all the elements outlined in 12VAC35-105-390 and 12VAC35-105-870 A~~;~~ ~~and.~~

~~5. A certificate of occupancy, floor plan (with dimensions), and any required inspections for all service locations.~~

C. The provider shall confirm his intent to renew the license prior to the expiration date of the license and notify the department in advance of any changes in service or location.

12VAC35-105-50. Issuance of licenses.

A. The commissioner ~~issues~~ may issue the following types of licenses [~~.~~:

~~B.~~ 1.] A conditional license shall be issued to a new provider ~~or service~~ for services that demonstrates compliance with administrative and policy regulations but has not demonstrated compliance with all the regulations.

[~~1.~~ a.] A conditional license shall not exceed six months.

[~~2.~~ b.] A conditional license may be renewed if the provider is not able to demonstrate compliance with all the regulations at the end of the license period. A conditional license and any renewals shall not exceed 12 successive months for all conditional licenses and renewals combined.

[~~3.~~ c.] A provider [~~or service~~] holding a conditional license [for a service] shall demonstrate progress toward compliance.

[~~4.~~ d.] A provider holding a conditional license shall not add services or locations during the conditional period.

[~~5.~~ e.] A group home or community residential service provider shall [~~not serve more than four individuals in a single location during the conditional period.~~ be limited to providing services in a single location, serving no more than four individuals during the conditional period.]

[~~C.~~ 2.] A provisional license may be issued to a provider ~~or~~ for a service that has demonstrated an inability to maintain compliance with regulations, has violations of human rights or licensing regulations that pose a threat to the health or safety of individuals being served, has multiple violations of human rights or licensing regulations, or has failed to comply with a previous corrective action plan.

[~~1.~~ a.] A provisional license may be issued at any time.

[~~2.~~ b.] The term of a provisional license [~~may~~ shall] not exceed six months.

[~~3.~~ c.] A provisional license may be renewed; but a provisional license and any renewals shall not exceed 12 successive months for all provisional licenses and renewals combined.

[~~4.~~ d.] A provider [~~or service~~] holding a provisional license [for a service] shall demonstrate progress toward compliance.

[~~5.~~ e.] A provider [~~for a service~~] holding a provisional license [for a service] shall not increase its services or locations or expand the capacity of the service.

~~5.~~ [~~6.~~ f.] A provisional license for a service shall be noted as a stipulation on the provider license. The stipulation shall also indicate the violations to be corrected and the expiration date of the provisional license.

[~~D.~~ 3.] A full license shall be issued after a provider or service demonstrates compliance with all the applicable regulations.

[~~1.~~ a.] A full license may be granted to a provider for service for up to three years. The length of the license shall be in the sole discretion of the commissioner.

[~~2.~~ b.] If a full license is granted for three years, it shall be referred to as a triennial license. A triennial license shall be granted to providers for services ~~who~~ that have ~~had no noncompliances or only violations that did not pose a threat to the health of safety of individuals being served during the previous license period~~ demonstrated compliance with the regulations. The commissioner may ~~waive this limitation if the provider has demonstrated consistent compliance for more than a year or that sufficient provider oversight is in place~~ issue a triennial license to a provider for service that had violations during the previous license period if those violations did not pose a threat to the health or safety of individuals being served and the provider or service has demonstrated consistent compliance for more than a year and has a process [in place] that provides sufficient oversight to maintain compliance [~~in place~~].

[~~3.~~ c.] If a full license is granted for one year, it shall be referred to as an annual license.

[~~4.~~ d.] The term of the first full renewal license after the expiration of a conditional or provisional license ~~may~~ shall not exceed one year.

[~~E.~~ B.] ~~The license may bear stipulations.~~ [~~Stipulations~~] ~~may be limitations on the provider or may impose additional requirements. Terms of any such stipulations on licenses issued to the provider shall be specified on the provider license.~~ [~~1. Stipulations may be added to the license issued to the provider to~~ The commissioner may add stipulations on a license issued to a provider that may] place limits on the provider or to impose additional requirements on the provider. [~~Terms of any such stipulations shall be specified on the provider license.~~

~~2. Stipulations may also recognize the expertise of the provider as defined and approved by the department to serve individuals with specialized needs.~~]

[~~F.~~ C.] A license shall not be transferred or assigned to another provider. A new application shall be made and a new license issued when there is a change in ownership.

[~~G.~~ D.] A license shall not be issued or renewed unless the provider is affiliated with a local human rights committee.

[~~H.~~ E.] No service ~~may~~ shall be issued a license with an expiration date that is after the expiration date of the provider license.

[~~I.~~ F.] A license ~~continues~~ shall continue in effect after the expiration date if the provider has submitted a renewal application before the date of expiration and there are no grounds to deny the application. The department shall issue a letter stating the provider or service license shall be effective for six additional months if the [renewed] license is not issued before the date of expiration.

12VAC35-105-60. Modification.

A. ~~Upon written request by the provider, the license may be modified during the term of the license with respect to the populations~~ A provider shall submit a written service modification application at least 45 days in advance of a proposed modification to its license. The modification may address the characteristics of individuals served (disability, age, [~~and~~ or] gender), the services offered, the locations where services are provided, existing stipulations ~~and the~~, or the maximum number of ~~beds. Approval of such request shall be at the sole discretion of the commissioner~~ individuals served under the provider [~~or service~~] license.

B. ~~A change requiring a modification of the license shall not be implemented prior to approval by the commissioner. The department may give approval to implement a modification pending the issuance of the modified license based on guidelines determined by the commissioner~~ Upon receipt of the completed service modification application, the commissioner may revise the provider [~~or service~~] license. Approval of such request shall be at the sole discretion of the commissioner.

C. A change requiring a modification of the license shall not be implemented prior to approval by the commissioner. The department may send the provider a letter approving implementation of the modification pending the issuance of the modified license.

12VAC35-105-70. Onsite reviews.

A. The department shall conduct an announced or unannounced onsite review of all new providers and services to determine compliance with this chapter.

B. The department shall conduct unannounced onsite reviews of licensed providers and each ~~of its services~~ service at any time and at least annually to determine compliance with these regulations. The annual unannounced onsite reviews shall be focused on preventing specific risks to individuals, including an evaluation of the physical facilities in which the services are provided.

C. The department may conduct announced and unannounced onsite reviews at any time as part of the investigations of complaints or incidents to determine if there is a violation of this chapter.

12VAC35-105-90. Compliance.

A. The department shall determine the level of compliance with each regulation as follows:

1. "Compliance" (C) means the provider ~~is~~ clearly ~~in compliance with~~ [~~acts in accordance with~~ meets the requirements of] a regulation.

2. "Noncompliance" (NC) means the provider ~~is clearly in noncompliance with~~ [violates or] fails to meet [~~or violates~~] part or all of a regulation.

3. "Not Determined" (ND) means that the provider must provide additional information to determine compliance with a regulation.

4. "Not Applicable" (NA) means the provider is specifically exempted from or not required to demonstrate compliance with the provisions of a regulation ~~at the time~~.

B. The provider, including its employees, contract service providers, student interns [,] and volunteers, shall comply with all applicable regulations.

12VAC35-105-100. Sanctions.

A. The commissioner may invoke the sanctions enumerated in ~~§ 37.1-185.1~~ § 37.2-419 of the Code of Virginia upon receipt of information that a licensed provider is:

1. In violation of the provisions of ~~§§ 37.1-84.1 and 37.1-179 through 37.1-189.1~~ §§ 37.2-400 through 37.2-422 of the Code of Virginia, these regulations, or the provisions of the Rules and Regulations to Assure the Rights of Individuals Receiving Services from Providers ~~of Mental Health, Mental Retardation and Substance Abuse Services~~ Licensed, Funded, or Operated by the Department of [~~Mental Health, Mental Retardation~~ Behavioral Health] and [~~Substance Abuse~~ Developmental] Services (12VAC35-115); and

2. Such violation adversely ~~impacts~~ affects the human rights of individuals, or poses an imminent and substantial threat to the health, safety or welfare of individuals.

The commissioner shall notify the provider in writing of the specific violations found [~~,~~] and of his intention to convene an informal conference pursuant to § 2.2-4019 of the Code of Virginia at which the presiding officer will be asked to recommend issuance of a special order.

B. The sanctions contained in the special order shall remain in effect during the pendency of any appeal of the special order.

12VAC35-105-110. Denial, revocation or suspension of a license.

A. An application for a license or license renewal may be denied and a full, conditional, or provisional license may be revoked or suspended for one or more of the following reasons:

1. The provider [or applicant] has violated any provisions of ~~Chapter 8 (§ 37.1-179 et seq.) of Title 37.1~~ Article 2 (§ 37.2-403 et seq.) of Chapter 4 of Title 37.2 of the Code of Virginia or these licensing regulations;

2. The provider's [or applicant's] conduct or practices are detrimental to the welfare of any individual receiving services or in violation of human rights identified in ~~§ 37.1-84.1~~ § 37.2-400 of the Code of Virginia or the human rights regulations (12VAC35-115);

3. The provider [or applicant] permits, aids, or abets the commission of an illegal act;

4. The provider [or applicant] fails or refuses to submit reports or to make records available as requested by the department;

5. The provider [or applicant] refuses to admit a representative of the department [who displays a state-issued photo identification] to the premises; ~~or~~

6. The provider [or applicant] fails to submit or implement an adequate corrective action plan~~.~~; or

7. The provider [or applicant] submits [~~substantively~~ any] misleading or false information to the department.

B. A provider shall be notified in writing of the department's intent to deny, revoke [,] or suspend a License; the reasons for the action; the right to appeal; and the appeal process. The provider has the right to appeal the department's decision under the provisions of the Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia).

12VAC35-105-115. Summary suspension.

A. In conjunction with any proceeding for revocation, denial [,] or other action, when conditions or practices exist that pose an immediate and substantial threat to the health, safety,

and welfare of the ~~residents~~ individuals living there, the commissioner may issue an order of summary suspension of the license to operate any group home or residential ~~facility~~ service for adults when he believes the operation of the home or ~~facility~~ residential service should be suspended during the pendency of such proceeding.

B. Prior to the issuance of an order of summary suspension, the department shall contact the Executive Secretary of the Supreme Court of Virginia to obtain the name of a hearing officer. The department shall schedule the time, date, and location of the administrative hearing with the hearing officer.

C. The order of summary suspension shall take effect upon its issuance. It shall be delivered by personal service and certified mail, return receipt requested, to the address of record of the licensee as soon as practicable. The order shall set forth:

1. The time, date, and location of the hearing;

2. The procedures for the hearing;

3. The hearing and appeal rights; and

4. Facts and evidence that formed the basis for the order of summary suspension.

D. The hearing shall take place within three business days of the issuance of the order of summary suspension.

E. The department shall have the burden of proving in any summary suspension hearing that it had reasonable grounds to require the licensee to cease operations during the pendency of the concurrent revocation, denial, or other proceeding.

F. The administrative hearing officer shall provide written findings and conclusions together with a recommendation as to whether the license should be summarily suspended [~~,~~] to the commissioner within five business days of the hearing.

G. The commissioner shall issue a final order of summary suspension or make a determination that the summary suspension is not warranted based on the facts presented and the recommendation of the hearing officer within seven business days of receiving the recommendation of the hearing officer.

H. The commissioner shall issue and serve on the group home or residential facility for adults or its designee by personal service or by certified mail, return receipt requested either:

1. A final order of summary suspension including (i) the basis for accepting or rejecting the hearing officer's recommendation, and (ii) notice that the [licensee of the] group home or residential [~~facility~~ service] may appeal the commissioner's decision to the appropriate circuit court no later than 10 days following issuance of the order; or

2. Notification that the summary suspension is not warranted by the facts and circumstances presented and that the order of summary suspension is rescinded.

I. The licensee may appeal the commissioner's decision on the summary suspension to the appropriate circuit court no more than 10 days after issuance of the final order.

J. The outcome of concurrent revocation, denial, and other proceedings shall not be affected by the outcome of any hearing pertaining to the appropriateness of the order of summary suspension.

K. At the time of the issuance of the order of summary suspension, the department shall contact the appropriate agencies to inform them of the action and the need to develop relocation plans for [~~residents~~ the individuals receiving residential or center-based services], and ensure that any other legal guardians or responsible family members are informed of the pending action.

12VAC35-105-130. Confidentiality of records.

Records that are confidential under federal or state law shall be maintained as confidential by the department and shall not be further disclosed except as required or permitted by law.

Part III
Administrative Services

Article 1
Management and Administration

12VAC35-105-140. License availability.

The current license or a copy shall be prominently displayed for public inspection in all service locations.

12VAC35-105-150. Compliance with applicable laws, regulations and policies.

The provider including its employees, contractors, students, and volunteers shall comply with:

1. These regulations;

2. ~~Terms~~ The terms and stipulations of the license;

3. All applicable federal, state [~~,~~] or local laws [~~,~~] and regulations including [~~but not limited to~~]:

a. Laws regarding employment practices including the Equal Employment Opportunity Act;

b. The Americans with Disabilities Act and the Virginians with Disabilities Act;

c. Occupational Safety and Health Administration regulations;

d. Virginia Department of Health regulations;

e. Laws ~~or~~ and regulations of the Department of Health Professions;

[f. Virginia Department of Medical Assistance Services regulations;

~~f.~~ g.] Uniform Statewide Building Code; and

[~~g.~~ h.] Uniform Statewide Fire Prevention Code.

4. Section ~~37.1-84.1~~ 37.2-400 of the Code of Virginia ~~on the human rights of individuals receiving services~~ and related human rights regulations adopted by the state board; and

~~5. Section 37.1-197.1 of the Code of Virginia regarding prescreening and predischarge planning. Providers responsible for complying with § 37.1-197.1 are required to develop and implement policies and procedures that include:~~

~~a. Identification of employees or services responsible for prescreening and predischarge planning services for all disability groups; and~~

~~b. Completion of predischarge plans prior to an individual's discharge in consultation with the state facility which:~~

~~(1) Involve the individual or his legally authorized representative and reflect the individual's preferences to the greatest extent possible consistent with the individual's needs.~~

~~(2) Include the mental health, mental retardation, substance abuse, social, educational, medical, employment, housing, legal, advocacy, transportation, and other services that the individual will need upon discharge into the community and identify the public or private agencies or persons that have agreed to provide them.~~

~~6.~~ 5.The provider's own policies. All required policies shall be in writing.

12VAC35-105-155. Preadmission screening, [~~predischarge~~ discharge] planning, involuntary commitment, and mandatory outpatient treatment orders.

A. Providers responsible for complying with § [§ 37.2-60 and] 37.2-505 of the Code of Virginia regarding community service board [and behavioral health authority] preadmission screening and [~~predischarge~~ discharge] planning shall [~~establish and~~] implement policies and procedures that include:

1. Identification, qualification, training, and responsibilities of employees responsible for [~~prescreening~~ preadmission screening] and [~~predischarge~~ discharge] planning.

2. Completion of [~~predischarge plans~~ a discharge plan] prior to an individual's discharge in consultation with the state facility that:

a. [~~Involve~~ Involves] the individual or his authorized representative and [~~reflect~~ reflects] the individual's preferences to the greatest extent possible consistent with the individual's needs.

b. [~~Include~~ Involves] mental health, mental retardation (intellectual disability), substance abuse, social, educational, medical, employment, housing, legal, advocacy, transportation, and other services that the individual will need upon discharge into the community and [~~identify~~ identifies] the public or private agencies or persons that have agreed to provide them.

B. Any provider who serves individuals through an emergency custody order, temporary detention order, or mandatory outpatient treatment order shall [~~develop and~~] implement policies and procedures to comply with §§ 37.2-800 through 37.2-817 of the Code of Virginia.

12VAC35-105-160. Reviews by the department; requests for information.

A. The provider shall permit representatives from the department to conduct reviews to:

1. Verify application information;

2. Assure compliance with this chapter; and

3. Investigate complaints.

B. The provider shall cooperate fully with inspections and provide all information requested to assist representatives from the department who conduct inspections.

C. The provider shall collect, maintain, and report or make available [to the department] the following information [~~to the department~~]:

1. Each allegation of abuse or neglect shall be reported to the assigned human rights advocate and the individual's authorized representative within 24 hours from the receipt of the initial allegation ~~and the investigating authority shall provide a written report of the results of the investigation of abuse or neglect to the provider and the human rights advocate within 10 working days, unless an exemption has been granted, from the date the investigation began. The report shall include but not be limited to the following: whether abuse, neglect or exploitation occurred; type of abuse; and whether the act resulted in physical or psychological injury~~. Reported information shall include the type of abuse, neglect, or exploitation that is alleged and whether there is physical or psychological injury to the individual.

2. ~~Deaths and~~ Each instance of death or serious ~~injuries~~ injury shall be reported in writing to the [~~department~~ department's assigned licensing specialist] within 24 hours of discovery and by phone to the ~~legally~~ individual's authorized representative [~~as applicable~~] within 24 hours ~~to~~. Reported information shall include [~~, but not be limited~~

~~to,~~] the following: the date and place of the individual's death or serious injury; the nature of the individual's injuries and the treatment ~~required~~ received; and the circumstances of the death or serious injury. Deaths that occur in a hospital as a result of illness or injury occurring when the individual was in a licensed service shall be reported.

3. Each instance of seclusion or restraint that does not comply with the human rights regulations or approved variances [~~,~~] or that results in injury to an individual [~~,~~] shall be reported to the ~~legally~~ individual's authorized representative and the assigned human rights advocate within 24 hours.

[~~4. Reports and other such information required by the department to establish compliance with these regulations or any other local, state, and federal statutues or regulations.~~

D. The provider shall submit, or make available, reports and information that the department requires to establish compliance with these regulations and applicable statutes.

E. ~~D.~~] Records that are confidential under federal or state law shall be maintained as confidential by the department and shall not be further disclosed except as [required or permitted] by law; however, there shall be no right of access to communications that are privileged pursuant to § 8.01-581.17 of the Code of Virginia.

[F. ~~If~~ ~~E.~~] Additional information requested by the department if compliance with a regulation cannot be determined~~, the department shall issue a licensing report requesting additional information. Additional information must~~ shall be submitted within 10 business days of the issuance of the licensing report requesting additional information. Extensions may be granted by the department when requested prior to the due date, but extensions shall not exceed an additional 10 business days.

[~~F.~~ G.] Applicants and providers shall not submit [~~substantively~~ any] misleading or false information to the department.

12VAC35-105-170. Corrective action plan.

A. If there is noncompliance with any ~~of these regulations~~ applicable regulation during an initial or ongoing review or investigation, the department shall issue a licensing report describing the noncompliance and requesting the provider to submit a corrective action plan for each violation cited.

B. The provider shall submit to the department and implement a written corrective action plan for each regulation with which it is found to be in ~~noncompliance with these regulations identified on~~ violation as identified in the licensing report.

C. The corrective action plan shall include a:

1. Description of the [~~systemic~~] corrective actions to be taken that will minimize the possibility that the violation will occur again;

2. Date of completion for each corrective action; and

3. Signature of the person responsible for the service.

D. The provider shall submit a corrective action ~~plans~~ plan to the department within 15 business days of the issuance of the licensing report. Extensions may be granted by the department when requested prior to the due date, but extensions shall not exceed an additional 10 business days. An immediate corrective action plan shall be required if the department determines that the violations pose a danger to individuals receiving the service.

E. ~~A corrective action plan shall be approved by the department~~ Upon receipt of the corrective action plan, the department shall review the plan and [~~shall~~] determine whether the plan is approved or not approved. The provider has an additional 10 business days to submit a revised corrective action plan after receiving a notice that the plan submitted has not been approved by the department.

F. When the provider disagrees with a citation of a violation, the provider shall discuss this disagreement with the licensing specialist initially. If the disagreement is not resolved, the provider may ask for a meeting with the licensing specialist's supervisor [, in consultation with the director of licensing,] to challenge a finding of noncompliance. The determination of the [~~supervisor~~ director] is final.

G. The provider shall monitor implementation of [~~pledged~~ approved] corrective action and include a plan for [~~such~~] monitoring in its quality assurance activities specified in 12VAC30-105-620.

12VAC35-105-180. Notification of changes.

A. The provider shall notify the department in writing prior to implementing changes that affect:

1. Organizational or administrative structure, including the name of the provider;

2. Geographic location of the provider or its services;

3. Service description as defined in these regulations;

4. Significant changes ~~in qualifications required for a position or qualifications of an individual occupying a position~~ to the staffing plan, position descriptions, or employee or contractor qualifications; or

5. Bed capacity for services providing residential or inpatient services.

B. The provider shall not implement the specified changes without the prior approval of the department.

C. The provider shall provide any documentation necessary for the department to determine continued compliance with

these regulations after any of these specified changes are implemented.

D. A provider shall notify the department in writing of its intent to discontinue services 30 days prior to the cessation of services. The provider ~~will~~ shall continue to provide all services that are identified in ~~every~~ each individual's ~~Individualized Services Plan (ISP)~~ ISP after it has given official notice of its intent to cease operations and until each individual is appropriately discharged. The provider ~~will~~ shall further continue to maintain substantial compliance with all applicable regulations as it discontinues its services.

E. All individuals receiving services [~~or~~ and] their authorized representatives shall be notified of the provider's intent to cease services in writing 30 days prior to the cessation of services. This written notification ~~will~~ shall be documented in each individual's ISP~~. Also, refer to~~ [~~as outlined in Records Management, Part V (12VAC35-105-870 et seq.) of this chapter~~].

12VAC35-105-190. Operating authority, governing body and organizational structure.

A. The provider shall provide the following evidence of its operating authority~~.~~:

1. ~~A public organization~~ Public organizations shall provide documents describing the administrative framework of the governmental department of which it is a component or describing the legal and administrative framework under which it was established and operates.

2. All private organizations except sole proprietorships shall provide a ~~certification~~ certificate from the State Corporation Commission.

B. The ~~provider's~~ provider shall provide an organizational chart that clearly identifies its governing body and organizational structure ~~shall be clearly identified by providing an organizational chart~~.

C. The provider shall document the role and actions of the governing body, which shall be consistent with its operating authority. The provider shall identify its operating elements and services, the internal relationship among these elements and services, and ~~the~~ its management or leadership structure.

12VAC35-105-210. Fiscal accountability.

A. The provider shall document financial ~~resources to operate its services or facilities or shall have a line of credit sufficient to cover 90 days of operating expense, based on a working budget showing projected revenue and expenses~~ arrangements or a line of credit that are adequate to ensure maintenance of ongoing operations for at least 90 days on an ongoing basis. The amount needed shall be based on a working budget showing projected revenue and expenses.

B. At the end of each fiscal year, the provider shall prepare, according to generally accepted accounting principles (GAAP) or those standards promulgated by the Governmental Accounting Standards Board (GASB) and the State Auditor of Public Accounts:

1. An operating statement showing revenue and expenses for the fiscal year just ended.

2. A balance sheet showing assets and liabilities for the fiscal year just ended. ~~At least once every three years, all financial records shall be audited by~~ The department may require an audit of all financial records by an independent Certified Public Accountant (CPA) or ~~audited~~ as otherwise provided by law or regulation.

3. Providers operating as a part of a local government agency are ~~excluded from providing~~ not required to provide a balance sheet; however, they shall provide a financial statement.

C. The provider shall have written internal controls to minimize the risk of theft or embezzlement of provider funds.

D. The provider shall identify in writing the title and qualifications of the person who has the authority and responsibility for the fiscal management of its services. At a minimum, the person who has the authority and responsibility for ~~the~~ fiscal management ~~of the provider~~ shall be bonded or otherwise indemnified.

[E. The provider shall notify the department in writing when its line of credit or other financial arrangement has been cancelled or significantly reduced at any time during the licensing period.]

12VAC35-105-220. Indemnity coverage.

To protect the interests of individuals, employees, and the provider from risks of liability, there shall be indemnity coverage to include:

1. General liability;

2. Professional liability;

3. ~~Vehicular~~ Commercial vehicular liability; and

4. Property damage.

12VAC35-105-230. Written fee schedule.

If the provider charges for services, the written schedule of rates and charges shall be available to the individual or authorized representative upon request.

12VAC35-105-240. Policy on funds of individuals receiving services.

A. The provider shall [~~establish and~~] implement a ~~written~~ policy for handling funds of individuals receiving services, including providing for separate accounting of individual funds.

B. The provider shall have documented financial controls to minimize the risk of theft or embezzlement of funds of individuals receiving services.

C. The provider shall purchase a surety bond or otherwise provide assurance for the security of all funds of individuals receiving services deposited with the provider.

Article 2
Physical Environment

12VAC35-105-260. Building inspection and classification.

All locations shall be inspected and approved as required by the appropriate building regulatory entity. ~~Approval~~ Documentation of approval shall be a Certificate of Use and Occupancy indicating the building is classified for its proposed licensed purpose. The provider shall submit a copy of the Certificate of Use and Occupancy to the department for new locations. This section does not apply to correctional facilities or home and noncenter-based services. Sponsored residential ~~services~~ service providers shall certify ~~compliance of~~ that their sponsored residential homes comply with this regulation.

12VAC35-105-265. Floor plans.

All services shall submit floor plans with room dimensions to the department for new locations. This does not apply to home or noncenter-based services.

12VAC35-105-270. Building modifications.

A. ~~Building~~ The provider shall submit building plans and specifications for ~~new~~ any planned construction ~~of locations, change in~~ at a new location, changes in the use of existing locations, and any structural modifications or additions to existing locations where services are provided ~~shall be submitted~~ for review by the department to determine compliance with the licensing regulations. This section does not apply to correctional facilities, jails, or home and noncenter-based services.

B. ~~An~~ The provider shall submit an interim plan to the department addressing safety and continued service delivery ~~shall be required for new~~ if new construction ~~or for conversion,~~ involving structural modifications or additions to existing buildings is planned.

12VAC35-105-280. Physical environment.

A. The physical environment, design, structure, furnishings, and lighting shall be appropriate to the ~~population~~ individuals served and the services provided ~~and~~.

B. The physical environment shall be accessible to individuals with physical and sensory disabilities [, if applicable].

~~B.~~ C. The physical environment and furnishings shall be clean, dry, free of foul odors, safe, and well-maintained.

~~C. The physical environment, design, structure, furnishing, and lighting shall be appropriate to the population served and the services provided.~~

D. Floor surfaces and floor ~~covering~~ coverings shall promote mobility in areas used by individuals and shall promote maintenance of sanitary conditions.

E. The physical environment shall be well ventilated. Temperatures shall be maintained between 65°F and 80°F [in all areas used by individuals].

F. Adequate hot and cold running water of a safe and appropriate temperature shall be available. Hot water accessible to individuals being served shall be maintained within a range of [~~100-120°F~~ 100-110°F]. If temperatures cannot be maintained within the specified range, the provider shall make provisions for protecting individuals from injury due to scalding.

G. Lighting shall be sufficient for the activities being performed and all areas within buildings and outside entrances and parking areas shall be lighted for safety.

H. Recycling, composting, and garbage disposal shall not create a nuisance, permit transmission of disease, or create a breeding place for insects or rodents.

I. If smoking is permitted, the provider shall make provisions for alternate smoking areas that are separate from the service environment. This [~~regulation~~ subsection] does not apply to home-based services.

J. For all program areas added after September 19, 2002, minimum room height shall be 7-1/2 feet.

K. This [section ~~regulation~~] does not apply to home and noncenter-based services. Sponsored residential services shall certify compliance of sponsored residential homes with this [~~regulation~~ section].

12VAC35-105-290. Food service inspections.

Any location where the provider is responsible for preparing or serving food shall request inspection and [shall] obtain approval by state or local health authorities regarding food service and general sanitation at the time of the original application and annually thereafter. Documentation of the most recent three inspections and approval shall be kept on file. This [~~regulation~~ section] does not apply to sponsored residential services or to group homes or community residential homes.

12VAC35-105-300. Sewer and water inspections.

A. ~~A location~~ Service locations shall ~~either~~ be on a public water and sewage ~~systems~~ system or ~~the location's~~ on a nonpublic water and sewage system ~~shall be inspected and approved by state or local health authorities at the time of its original application and annually thereafter. Documentation of the three most recent inspections and approval shall be~~

~~kept on file~~. ~~Sponsored~~ Prior to a location being licensed, the provider shall obtain the report from the building inspector pertaining to the septic system and its capacity. Nonpublic water and sewer systems shall be maintained in good working order and in compliance with local and state laws. Providers of sponsored residential home services shall certify ~~compliance of~~ that their sponsored residential homes comply with this [~~regulation~~ section].

B. ~~A location that is~~ Service locations that are not on a public water system shall have a water sample tested prior to being licensed and annually by an accredited, independent laboratory for the absence of chloroform. The water sample shall also be tested for lead or nitrates if recommended by the local health department. Documentation of the three most recent inspections shall be kept on file.

12VAC35-105-310. Weapons.

The provider or facility shall have and implement a written policy governing the use and possession of firearms, pellet guns, air rifles [,] and other weapons on the ~~facility's~~ premises [, including parking areas,] of the provider's services. The policy shall provide that no firearms, pellet guns, air rifles [,] and other weapons ~~on the facility's premises~~ shall be permitted unless the weapons are:

1. In the possession of licensed security or sworn law-enforcement personnel;

2. Kept securely under lock and key; or

3. Used under the supervision of a responsible adult in accordance with policies and procedures developed by the ~~facility~~ provider for the weapons' lawful and safe use.

12VAC35-105-320. Fire inspections.

The provider shall document at the time of its original application and annually thereafter that buildings and equipment in residential service locations ~~with more than eight beds~~ serving more than eight individuals are maintained in accordance with the Virginia Statewide Fire Prevention Code (13VAC5-51). This section does not apply to correctional facilities or home and noncenter-based or sponsored residential home services.

12VAC35-105-325. Community liaison.

Each residential service shall designate a staff person as a community liaison responsible for facilitating cooperative relationships with neighbors, local law-enforcement personnel, local government officials, and the community at large.

Article 3
Physical Environment of Residential/Inpatient Service Locations

12VAC35-105-330. Beds.

A. The provider shall not operate more beds than the number for which its service location or locations are licensed.

B. A community ~~intermediate care facility for the mentally retarded~~ ICF/MR may not have more than ~~20~~ 12 beds at any one location. This applies to new applications for services ~~after September 19, 2002~~ and not to existing services or locations licensed prior to [~~the effective date of these regulations~~ December 7, 2011].

12VAC35-105-340. Bedrooms.

A. ~~Size of bedrooms~~ Bedrooms shall meet the following square footage requirements~~.~~:

1. Single occupancy bedrooms shall have no less than 80 square feet of floor space.

2. Multiple occupancy bedrooms shall have no less than 60 square feet of floor space per individual.

3. This subsection does not apply to community gero-psychiatric residential services.

B. No more than four individuals shall share a bedroom, except in group homes where no more than two individuals shall share a room. This does not apply to group home locations licensed prior to [~~the effective date of these regulations~~ December 7, 2011].

C. Each individual shall ~~be assigned~~ have adequate [private] storage space accessible to the bedroom for clothing and personal belongings.

D. This section does not apply to correctional facilities and jails. ~~Sponsored~~ Providers of sponsored residential home services shall certify ~~compliance of~~ that their sponsored residential homes comply with this [~~regulation~~ section].

12VAC35-105-350. Condition of beds.

Beds shall be clean, comfortable, and equipped with a mattress, pillow, blankets, and bed linens. When a bed is soiled, providers shall assist individuals with bathing as needed, and provide clean clothing and bed linen. ~~Sponsored~~ Providers of sponsored residential home services shall certify ~~compliance of~~ that their sponsored residential homes comply with this [~~regulation~~ section].

12VAC35-105-360. Privacy.

A. Bedroom and bathroom windows and doors shall provide privacy.

B. Bathrooms [~~not~~] intended for [~~individual~~] use [by more than one individual at the same time] shall provide privacy for showers and toilets.

C. No required path of travel to the bathroom shall be through another bedroom.

D. This section does not apply to correctional facilities and jails. ~~Sponsored~~ Providers of sponsored residential home services shall certify ~~compliance of~~ that their sponsored residential homes comply with this [~~regulation~~ section].

12VAC35-105-370. Ratios of toilets, basins [,] and showers or baths.

For all residential and inpatient locations established, constructed [,] or reconstructed after January 13, 1995, there shall be at least one toilet, one hand basin, and shower or bath for every four individuals. ~~Sponsored~~ This section does not apply to correctional facilities or jails. Providers of sponsored residential home services shall certify ~~compliance of~~ that their sponsored residential homes comply with this [~~regulation~~ section]. ~~This section does not apply to correctional facilities or jails.~~

12VAC35-105-380. Lighting.

Each service location shall have adequate lighting in halls and bathrooms at night. ~~Sponsored~~ Providers of sponsored residential home services shall certify ~~compliance of~~ that their sponsored residential homes comply with this [~~regulation~~ section].

Article 4
Human Resources

12VAC35-105-390. Confidentiality and security of personnel records.

A. The provider shall maintain an organized system to manage and protect the confidentiality of personnel files and records.

B. Physical and data security controls shall exist for ~~electronic records~~ personnel records maintained in electronic databases.

C. Providers shall comply with requirements of the ~~American~~ Americans with Disabilities Act and the Virginians with Disabilities Act regarding retention of employee health-related information in a file separate from personnel files.

12VAC35-105-400. Criminal registry checks.

A. ~~The provider shall develop a policy for the criminal history and registry checks for all employees, contractors, students and volunteers. The policy shall contain, at a minimum, a disclosure statement concerning whether the person has ever been convicted of or is the subject of pending charges for any offense~~ Providers shall comply with the background check requirements for direct care positions outlined in [~~§~~ §§] 37.2-416 [, 37.2-506, and 37.2-607] of the Code of Virginia for individuals hired after July 1, 1999.

B. ~~After July 1, 1999, providers shall comply with the background check requirements for direct care positions outlined in § 37.1-183.3 of the Code of Virginia~~ Prior to a new employee beginning his duties, the provider shall obtain the employee's written consent and personal information necessary to obtain a search of the registry of founded complaints of child abuse and neglect maintained by the Virginia Department of Social Services [.]

C. The provider shall ~~submit all information required by the department to complete the background checks for all employees, and for contractors, students and volunteers, if required by the provider's policy~~ develop a [written] policy for criminal history and registry checks for all employees, contractors, students, and volunteers. The policy shall require at a minimum a disclosure statement from the employee, contractor, student, or volunteer stating whether the person has ever been convicted of or is the subject of pending charges for any offense and shall address what actions the provider will take should it be discovered that an employee, student, contractor, or volunteer has a founded case of abuse or neglect or both, or a conviction or pending criminal charge.

D. ~~Prior to a new employee beginning his duties, the provider shall obtain the employee's written consent and personal information necessary to obtain a search of the registry of founded complaints of child abuse and neglect maintained by the Department of Social Services. Results of the search of the registry shall be maintained in the employee's personnel record~~ The provider shall submit all information required by the department to complete the background and registry checks for all employees and for contractors, students, and volunteers if required by the provider's policy.

E. The provider shall maintain the following documentation:

1. The disclosure statement; and

2. Documentation that the provider submitted all information required by the department to complete the background and registry checks, ~~and~~ memoranda from the department transmitting the results to the provider, and the results from the Child Protective Registry check.

12VAC35-105-410. Job description.

A. Each employee or contractor shall have a written job description that includes:

1. Job title;

2. Duties and responsibilities required of the position;

3. Job title of the immediate supervisor; and

4. Minimum knowledge, skills, and abilities, experience or professional qualifications required for entry level as specified in 12VAC35-105-420.

B. Employees or contractors shall have access to their current job description. ~~There~~ The provider shall ~~be a~~ have written documentation of the mechanism ~~for advising~~ used to advise employees or contractors of changes to their job responsibilities.

12VAC35-105-420. Qualifications of employees or contractors.

A. Any person who assumes the responsibilities of any ~~employee~~ position as an employee or a contractor shall meet the minimum qualifications of that position as determined by job descriptions.

B. Employees and contractors shall comply, as required, with the regulations of the Department of Health Professions. The provider shall design ~~and~~, implement ~~a mechanism~~, and document the process used to verify professional credentials.

C. ~~Service directors~~ Supervisors shall have experience in working with ~~the population~~ individuals being served and in providing the services outlined in the service description.

D. Job descriptions shall include minimum knowledge, skills and abilities, professional ~~qualification~~ qualifications and experience appropriate to the duties and responsibilities required of the position.

[E. All staff shall demonstrate a working knowledge of the policies and procedures that are applicable to his specific job or position.]

12VAC35-105-430. Employee or contractor personnel records.

A. Employee or contractor personnel ~~record~~ records, whether hard-copy or electronic, shall include:

1. ~~Identifying~~ Individual identifying information;

2. Education and training history;

3. Employment history;

4. Results of ~~the~~ any provider credentialing process including methods of verification of applicable professional licenses or certificates;

5. Results of reasonable efforts to secure job-related references and reasonable verification of employment history;

6. Results of the required criminal background checks and ~~a search~~ searches of the registry of founded complaints of child abuse and neglect~~, if any~~;

7. Results of performance evaluations;

8. A record of disciplinary action taken by the provider, if any;

9. A record of adverse action by any licensing and oversight bodies ~~and~~ or organizations ~~and state human rights regulations~~, if any; and

10. A record of participation in employee development activities, including orientation.

B. Each employee or contractor personnel record shall be retained in its entirety for a minimum of three years after the employee's or contractor's termination of employment.

12VAC35-105-440. Orientation of new employees, contractors, volunteers, and students.

New employees, contractors, volunteers, and students shall be oriented commensurate with their function or job-specific responsibilities within 15 business days. ~~Orientation to~~ The provider shall document that the orientation covers each of the following policies ~~shall be documented. Orientation shall include~~, procedures, and practices:

1. Objectives and philosophy of the provider;

2. Practices of confidentiality including access, duplication, and dissemination of any portion of an individual's record;

3. Practices that assure an individual's rights including orientation to human rights regulations;

4. Applicable personnel policies;

5. Emergency preparedness procedures;

[6. Person-centeredness;]

[~~6.~~ 7.] Infection control practices and measures; and

[~~7.~~ 8.] Other policies and procedures that apply to specific positions and specific duties and responsibilities.

12VAC35-105-450. Employee training and development.

The provider shall provide training and development opportunities for employees to enable them to ~~perform~~ [~~fully~~] support the individuals served and to carry out the responsibilities of their ~~job~~ jobs. The provider shall develop a training policy ~~must address~~ that addresses the frequency of retraining on medication administration, behavior [~~management~~ intervention], [~~and~~] emergency preparedness [, and infection control, to include flu epidemics]. ~~Training~~ Employee participation in training and development opportunities shall be documented ~~in the employee personnel records~~ and accessible to the department.

12VAC35-105-460. Emergency medical or first aid training.

There shall be at least one employee or contractor on duty at each location who holds a current certificate [~~,~~ (i)] issued by [~~a recognized~~ the American Red Cross, the American Heart Association, or comparable] authority [~~,~~] in standard first aid and cardiopulmonary resuscitation [~~,~~ (CPR)] or [~~with~~

(ii) as an] emergency medical [~~training~~ technician]. A [~~nurse or physician~~ licensed medical professional] who holds a current professional license shall be deemed to hold a current certificate in first aid, but not in CPR.

12VAC35-105-470. Notification of policy changes.

All employees or contractors shall be kept informed of policy changes that affect performance of duties. The provider shall have written documentation of the process used to advise employees or contractors of policy changes.

12VAC35-105-480. Employee or contractor performance evaluation.

A. The provider shall [~~develop and~~] implement a [written] policy for evaluating employee ~~or~~ and contractor performance.

B. Employee development needs and plans shall be a part of the performance evaluation.

C. The provider shall evaluate employee ~~or~~ and contractor performance at least annually.

12VAC35-105-490. Written grievance policy.

The provider shall [~~have~~ implement] a written grievance policy and ~~a mechanism to~~ shall inform employees of grievance procedures. The provider shall have documentation of the process used to advise employees of grievance procedures.

12VAC35-105-500. Students and volunteers.

A. The provider shall [~~have and~~] implement a [written] policy that clearly defines and communicates the requirements for the use and responsibilities of students and volunteers including selection and supervision.

B. The provider shall not rely on students or volunteers for the provision of direct care services. The provider staffing plan shall not include volunteers or students.

12VAC35-105-510. Tuberculosis screening.

A. Each new employee, contractor, student [,] or volunteer who will have direct contact with individuals ~~being served~~ receiving services shall obtain a statement of certification by a qualified licensed practitioner indicating the absence of tuberculosis in a communicable form within 30 days of employment or initial contact with individuals receiving services. The employee shall submit a copy of the original screening to the provider. A statement of certification shall not be required for ~~an~~ a new employee who has separated from service with another licensed provider with a break in service of six months or less or who is currently working for another licensed provider. ~~The employee must submit a copy of the original screening to the provider.~~

B. All employees, contractors, students [,] or volunteers in substance abuse co-occurring outpatient or ~~substance abuse~~ residential treatment services shall be certified as tuberculosis free on an annual basis by a qualified licensed practitioner.

C. Any employee, contractor, student [,] or volunteer who comes in contact with a known case of active tuberculosis disease or who develops symptoms of active tuberculosis disease (including, but not limited to fever, chills, hemoptysis, cough, fatigue, night sweats, weight loss [,] or anorexia) of three weeks duration shall be screened as determined appropriate for continued contact with employees, contractors, students, volunteers, or individuals receiving services based on consultation with the local health department.

D. An employee, contractor, student [,] or volunteer suspected of having active tuberculosis shall not be permitted to return to work or have contact with employees, contractors, students, volunteers [,] or individuals receiving services until a physician has determined that the person is free of active tuberculosis.

Article 5
Health and Safety Management

12VAC35-105-520. Risk management.

A. The provider shall designate a person responsible for risk management.

B. The provider shall [~~document and~~] implement a [written] plan to identify, monitor, reduce [,] and minimize risks associated with personal injury, infectious disease, property damage or loss, and other sources of potential liability.

C. ~~As part of the plan, the~~ The provider shall conduct and document that a safety inspection has been performed at least annually ~~its own safety inspections~~ of ~~all~~ each service ~~locations~~ location owned, rented, or leased by the provider. Recommendations for safety improvement shall be documented and implemented by the provider.

D. The provider shall document serious injuries to employees, contractors, students, volunteers [,] and visitors. Documentation shall be kept on file for three years. The provider shall evaluate injuries at least annually. Recommendations for improvement shall be documented and implemented by the provider.

~~E. The risk management plan shall establish and implement policies to identify any populations at risk for falls and to develop a prevention/management program.~~

~~F. The provider shall develop, document and implement infection control measures, including the use of universal precautions.~~

12VAC35-105-530. Emergency preparedness and response plan.

A. The provider shall develop a written emergency preparedness and response plan for all of [~~a provider's~~ its] services and locations that describes [its] approach to emergencies throughout the organization or community. This plan shall include an analysis of potential emergencies that could disrupt the normal course of service delivery including emergencies that would require expanded or extended care over a prolonged period of time. The plan shall address:

1. Specific procedures describing mitigation, preparedness, response [,] and recovery strategies, actions, and responsibilities for each emergency.

2. Documentation of ~~contact~~ [~~involvement~~ coordination] with the local emergency ~~coordinator~~ authorities to determine local disaster risks and community-wide plans to address different disasters and emergency situations.

~~2. Analysis of the provider's capabilities and potential hazards, including natural disasters, severe weather, fire, flooding, work place violence or terrorism, missing persons, severe injuries, or other emergencies that would disrupt the normal course of service delivery.~~

3. The process for notifying local and state authorities of the emergency and a process for contacting staff when emergency response measures are initiated.

4. Written emergency management policies outlining specific responsibilities for provision of administrative direction and management of response activities, coordination of logistics during the emergency, communications, life safety of employees, contractors, students, volunteers, visitors [,] and individuals receiving services, property protection, community outreach, and recovery and restoration.

~~4.~~ 5. Written emergency response procedures for initiating the response and recovery phase of the plan including a description of how, when, and by whom the phases will be activated. This includes assessing the situation; protecting individuals receiving services, employees, contractors, students, volunteers, visitors, equipment [,] and vital records; and restoring services. Emergency procedures shall address:

a. ~~Communicating with employees, contractors and community responders~~ Warning and [~~notification of~~ notifying] individuals receiving services;

b. ~~Warning and notification of individuals receiving services~~ Communicating with employees, contractors, and community responders;

c. Designating alternative roles and responsibilities of staff during emergencies including to whom they will report in the provider's organization command structure and when activated in the community's command structure;

d. Providing emergency access to secure areas and opening locked doors;

~~d.~~ e. Conducting evacuations to emergency shelters or alternative sites and accounting for all individuals receiving services;

~~e.~~ f. Relocating individuals receiving residential or inpatient services, if necessary;

~~f.~~ g. Notifying family members ~~and legal guardians~~ or authorized representatives;

~~g.~~ h. Alerting emergency personnel and sounding alarms;

~~h.~~ i. Locating and shutting off utilities when necessary; and

j. Maintaining a 24 hour telephone answering capability to respond to emergencies for individuals receiving services.

6. Processes for managing the following under emergency conditions:

a. Activities related to the provision of care, treatment, and services including [~~but not limited to~~] scheduling, modifying, or discontinuing services; controlling information about individuals receiving services; providing medication; and transportation services;

b. Logistics related to critical supplies such as pharmaceuticals, food, linen, and water;

c. Security including access, crowd control, and traffic control; and

d. Back-up communication systems in the event of electronic or power failure.

7. Specific processes and protocols for evacuation of the provider's building or premises when the environment cannot support adequate care, treatment, and services.

~~5.~~ 8. Supporting documents that would be needed in an emergency, including emergency call lists, building and site maps necessary to shut off utilities, designated escape routes, and list of major resources such as local emergency shelters.

~~6.~~ 9. Schedule for testing the implementation of the plan and conducting emergency preparedness drills.

B. The provider shall [~~develop and~~] implement ~~periodic~~ annual emergency preparedness and response training for all employees, [~~individuals receiving services.~~] contractors, students, and volunteers. ~~Training~~ This training shall also be provided as part of orientation for new employees and cover responsibilities for:

1. Alerting emergency personnel and sounding alarms;

2. Implementing evacuation procedures, including evacuation of individuals with special needs (i.e., deaf, blind, nonambulatory);

3. Using, maintaining, and operating emergency equipment;

4. Accessing emergency medical information for individuals receiving services; and

5. Utilizing community support services.

C. The provider shall review the emergency preparedness plan annually and make necessary revisions. Such revisions shall be communicated to employees, contractors, students ~~and~~, volunteers, and individuals receiving services and incorporated into training for employees, contractors, students [,] and volunteers and [into the] orientation of individuals to services.

D. In the event of a disaster, fire, emergency or any other condition that may jeopardize the health, safety [~~and~~, or] welfare of individuals, the provider shall take appropriate action to protect the health, safety [,] and welfare of [~~the~~] individuals receiving services and take appropriate actions to remedy the conditions as soon as possible.

E. Employees, contractors, students [,] and volunteers shall be knowledgeable in and prepared to implement the emergency preparedness plan in the event of an emergency. The plan shall include a policy regarding ~~periodic~~ regularly scheduled emergency preparedness training for all employees, contractors, students [,] and volunteers.

F. In the event of a disaster, fire, emergency, or any other condition that may jeopardize the health, safety [~~and~~, or] welfare of individuals, the provider should first respond and stabilize the [~~disaster/emergency~~ disaster or emergency]. After the [~~disaster/emergency~~ disaster or emergency] is stabilized, the provider should report the [~~disaster/emergency~~ disaster or emergency] to the department, but no later than ~~72~~ 24 hours after the incident occurs.

G. Providers of residential services shall have at all times a three-day supply of emergency food and water for all residents and staff. Emergency food supplies should include foods that do not require cooking. Water supplies shall include one gallon of water [,] per person [,] per day.

H. This [section ~~regulation~~] does not apply to home and noncenter-based services.

12VAC35-105-540. Access to telephone in emergencies; emergency telephone numbers.

A. Telephones shall be accessible for emergency purposes.

B. ~~Current emergency telephone numbers and location of the nearest hospital, ambulance service, rescue squad and other trained medical personnel, poison control center, fire station and the police are prominently posted near the telephones~~ Instructions for contacting emergency services and telephone numbers shall be prominently posted near the telephone including [~~directions to the nearest hospital and~~] how to contact provider medical personnel if appropriate.

C. This [section ~~regulation~~] does not apply to home and noncenter-based services and correctional facilities.

12VAC35-105-550. First aid kit accessible.

A. A well-stocked first aid kit shall be maintained and readily accessible for minor injuries and medical emergencies at each service location and to employees or contractors providing in-home services or traveling with individuals. The minimum requirements of a well-stocked first aid kit that shall be maintained include a thermometer, bandages, saline solution, band-aids, sterile gauze, tweezers, instant ice-pack, adhesive tape, first-aid cream, and antiseptic soap~~, an accessible, unexpired 30 cc bottle of Syrup of Ipecac (for use at the direction of the Poison Control Center or a physician), and activated charcoal (for use at the direction of the Poison Control Center or a physician)~~.

B. A cardiopulmonary resuscitation (CPR) face guard or mask shall be readily accessible.

12VAC35-105-560. Operable flashlights or battery lanterns.

Operable flashlights or battery lanterns shall be readily accessible to employees and contractors in services that operate between dusk and dawn to use in emergencies. This [section ~~regulation~~] does not apply to home and noncenter-based services.

12VAC35-105-580. Service description requirements.

A. The provider shall develop, implement, review [,] and revise its descriptions of services offered according to the provider's mission and shall ~~have that information~~ make service descriptions available for public review.

B. The provider shall ~~document that~~ outline how each service offers a structured program of ~~care~~ individualized interventions and care designed to meet the individuals' physical and emotional needs; provide protection, guidance and supervision; and meet the objectives of any required [~~service~~ individualized services] plan.

C. The provider shall prepare a written description of each service it offers. ~~Service description elements~~ Elements of each service description shall include:

1. ~~Goals~~ Service goals;

2. ~~Care~~ A description of care, treatment, training, ~~habilitation,~~ or other supports provided;

3. Characteristics and needs of ~~the population~~ individuals to be served;

4. Contract services, if any;

5. ~~Admission~~ Eligibility requirements and admission, continued stay, and exclusion criteria;

6. ~~Termination of treatment~~ Service termination and discharge or transition criteria; and

7. Type and role of employees or contractors.

D. The provider shall revise ~~a~~ the written service description whenever the [operation of the] service [~~description~~] changes.

E. The provider shall not implement services that are inconsistent with its most current service description.

F. The provider shall admit only those individuals whose service needs are consistent with the service description, for whom services are available, and for which staffing levels and types meet the needs of the individuals served.

G. The provider shall provide for the physical separation of children and adults in residential and inpatient services and shall provide separate group programming for adults and children, except in the case of family services. The provider shall provide for the safety of children accompanying parents receiving services. Older adolescents transitioning from school to adult activities may participate in mental retardation (intellectual disability) day support services with adults.

~~G. If the provider offers substance abuse treatment services, the~~ H. The service description for substance abuse treatment services shall address the timely and appropriate treatment of [~~substance abusing~~] pregnant women [with substance abuse (substance use disorders)].

I. If the provider plans to serve individuals as of a result of a temporary detention order to a service, prior to admitting those individuals to that service, the provider shall submit a written plan for adequate staffing and security measures to ensure the individual can be served safely within the service to the department for approval. If [the plan is] approved [,] the department will add a stipulation to the license authorizing the provider to serve individuals who are under temporary detention orders.

[~~J. The provider shall have a written plan on cultural and linguistic competency that assists the organization in delivering culturally competent services and use the National Standards on Culturally and Linguistically Appropriate Services (CLAS) as a primary guidance document.~~]

12VAC35-105-590. Provider staffing plan.

A. The provider shall [~~design and~~] implement a [written] staffing plan ~~including~~ that includes the ~~type~~ types [, ~~and~~] ~~role~~ roles [,] and numbers of employees and contractors [that are] ~~reflects the~~ required to provide the service. This staffing plan shall reflect the:

1. Needs of the ~~population~~ individuals served;

2. Types of services offered;

3. The service description; and

4. ~~The number~~ Number of people to be served at a given time.

B. The provider shall develop a written transition staffing plan for new services, added locations, and changes in capacity.

C. The provider shall meet the following staffing requirements ~~relate~~ related to supervision.

1. The provider shall describe how employees, volunteers, contractors [,] and student interns ~~are to~~ will be supervised in the staffing plan and how that supervision will be documented.

2. Supervision of employees, volunteers, contractors [,] and student interns shall be provided by persons who have experience in working with [~~the population served~~ individuals receiving services] and in providing the services outlined in the service description. ~~In addition, supervision of mental health services shall be performed by a QMHP and supervision of mental retardation services shall be performed by a QMRP or an employee or contractor with experience equivalent to the educational requirement. Supervision of IFDDS Waiver services shall be performed by a QDDP or an employee or contractor with equivalent experience. Supervision of Brain Injury Waiver services or residential services shall be performed by a QBIP or an employee or contractor with equivalent experience.~~

3. Supervision shall be appropriate to the services provided and the needs of the individual. Supervision shall be documented.

4. Supervision shall include responsibility for approving assessments and individualized services plans [, as appropriate]. This responsibility may be delegated to an employee or contractor who ~~is a QMHP, QMRP, QDDP, or QBIP or who has equivalent experience~~ meets the qualification for supervision as defined in this [~~regulation~~ section].

[~~5. Supervision of mental health and substance abuse services and co-occurring disorders shall be provided by a person who is trained and experienced in providing psychiatric, mental health, or substance abuse services to individuals who have a psychiatric or substance abuse disorder diagnosis including (i) a doctor of medicine or osteopathy; (ii) a psychiatrist who is a doctor of medicine or osteopathy specializing in psychiatry and licensed in Virginia; (iii) a psychologist who has a master's degree in psychology from a college or university with at least one year of clinical experience; (iv) a social worker with at least a bachelor's degree in human services or related field (social work, psychology, psychiatric rehabilitation, sociology, counseling, vocational rehabilitation, human~~

~~services counseling, or other degree deemed equivalent to those described); (v) a Registered Psychiatric Rehabilitation Provider (RPRP) registered with the United States Psychiatric Rehabilitation Association (USPRA); (vi) a registered nurse licensed in Virginia with at least one year of clinical experience; or (vii) any other licensed mental health professional with at least one year of clinical experience.~~

5. Supervision of mental health, substance abuse, or co-occurring services that are of an acute or clinical nature such as outpatient, inpatient, intensive in-home, or day treatment shall be provided by a licensed mental health professional or a mental health professional who is license-eligible and registered with a board of the Department of Health Professions.

6. Supervision of mental health, substance abuse, or co-occurring services that are of a supportive or maintenance nature, such as psychosocial rehabilitation, mental health supports shall be provided by a QMHP-A. An individual who is QMHP-E may not provide this type of supervision.]

[~~6.~~ 7.] Supervision of mental retardation (intellectual disability) services shall be provided by a person with at least one year of documented experience working directly with individuals who have mental retardation (intellectual disability) or other developmental disabilities and holds at least a bachelor's degree in a human services field [~~including but not limited to~~ such as] sociology, social work, special education, rehabilitation counseling, nursing, or psychology. [Experience may be substituted for the education requirement.]

[~~7.~~ 8.] Supervision of individual and family developmental disabilities support (IFDDS) services shall be provided by a person possessing at least one year of documented experience working directly with individuals who have [~~related conditions~~ developmental disabilities] and is one of the following: a doctor of medicine or osteopathy [licensed in Virginia]; a registered nurse [licensed in Virginia]; or a person holding at least a bachelor's degree in a human [~~service~~ services] field [~~including but not limited to~~ such as] sociology, social work, special education, rehabilitation counseling, or psychology. [Experience may be substituted for the education requirement.]

[~~8.~~ 9.] Supervision of brain injury services shall be provided at a minimum by a clinician in the health professions [field] who is trained and experienced in providing brain injury services to individuals who have a brain injury diagnosis including: (i) a doctor of medicine or osteopathy [licensed in Virginia]; (ii) a psychiatrist who is a doctor of medicine or osteopathy specializing in psychiatry and licensed in Virginia; (iii) a psychologist who has a master's degree in psychology from a college or university with at least one year of clinical experience; (iv) a social worker who has a bachelor's degree in human services or a related field (social work, psychology, psychiatric evaluation, sociology, counseling, vocational rehabilitation, human services counseling, or other degree deemed equivalent to those described) from an accredited college or university with at least two years of clinical experience providing direct services to individuals with a diagnosis of brain injury; (v) a Certified Brain Injury Specialist; (vi) a registered nurse licensed in Virginia with at least one year of clinical experience; or (vii) any other licensed rehabilitation professional with one year of clinical experience.

[~~9. Providers of intensive in-home services shall define the nature and frequency of supervision by the LMHP provided to employees working directly with individuals receiving services. The LMHP shall provide direct supervision to these employees at least bi-weekly.~~

~~10. Individuals employed as supervisors prior to [the effective date of these regulations] may supervise services based on their experience.~~

~~11. Supervision shall include responsibility for approving assessments and individualized services plans. This responsibility may be delegated to an employee or contractor who meets the qualifications for supervision as defined in these regulations.~~]

D. The provider shall employ or contract with persons with appropriate training, as necessary, to meet the specialized needs of and to ensure the safety of individuals being served in residential services with medical or nursing needs~~,~~; speech, language, or hearing problems; or other needs where specialized training is necessary.

E. ~~The provider~~ Providers of brain injury services shall employ or contract with a neuropsychologist or licensed clinical psychologist specializing in brain injury to assist, as appropriate, with initial assessments, development of individualized services plans, crises, staff training, and service design.

F. Direct care staff ~~in~~ who provide brain injury services shall ~~meet the qualifications of a QPPBI and successfully complete an approved training curriculum on brain injuries within six months of employment~~ have at least a high school diploma and two years of experience working with individuals with disabilities or shall have successfully completed an approved training curriculum on brain injuries within six months of employment.

12VAC35-105-600. Nutrition.

A. A provider preparing and serving food shall:

1. ~~Have~~ Implement a written plan for the provision of food services, which ensures access to nourishing, well-balanced, [~~healthful~~ varied, and healthy] meals;

2. Make reasonable efforts to prepare meals that consider [the] cultural background, personal preferences, and food habits and that meet the dietary needs of the individuals served; and

3. Assist individuals who require assistance feeding themselves in a manner that effectively addresses any deficits.

B. Providers of residential and inpatient services shall [~~develop and~~] implement a policy to monitor each individual's food consumption [and nutrition] for:

1. Warning signs of changes in physical or mental status related to nutrition; and

2. Compliance with any needs determined by the individualized services plan or prescribed by a physician, nutritionist [,] or health care professional.

12VAC35-105-610. Community participation.

~~Opportunities shall be provided for individuals receiving services~~ Individuals receiving residential [, and] day support [~~, and day treatment~~] services shall be afforded [~~the opportunity~~ opportunities] to participate in community activities [that are based on their personal interests or preferences]. ~~This regulation applies to residential, day support and day treatment services.~~ The provider shall have written documentation that such opportunities were made available to individuals served.

12VAC35-105-620. Monitoring and evaluating service quality.

The provider shall [~~have~~ implement] ~~a mechanism~~ written policies and procedures to monitor and evaluate service quality and effectiveness on a systematic and ongoing basis. Input from individuals receiving services and their authorized representatives, if applicable, about services used and satisfaction level of participation in the direction of service planning shall be part of the provider's quality assurance system. The provider shall implement improvements, when indicated.

Article 2
Screening, Admission, Assessment, Service Planning [,] and Orientation

12VAC35-105-630. ~~Policies on screening, admission and referrals.~~ (Repealed.)

~~A. The provider shall establish written criteria for admission that include:~~

~~1. A description of the population to be served;~~

~~2. A description of the types of services offered; and~~

~~3. Exclusion criteria.~~

~~B. The provider shall admit only those individuals whose service needs are consistent with the service description, for whom services are available, and for which staffing levels and types meet the needs of the individuals served.~~

~~C. The provider shall complete a preliminary assessment detailed enough to determine that the individual qualifies for admission and to develop a preliminary individualized services plan for individuals admitted to services. Employee or contractors responsible for screening, admitting and referral shall have immediate access to written service descriptions and admission criteria.~~

~~D. The provider shall assist individuals who are not admitted to identify other appropriate services.~~

~~E. The provider shall develop and implement procedures for screening, admitting, and referring individuals to services, to include staff who are designated to perform these activities.~~

12VAC35-105-640. ~~Screening and referral services documentation and retention.~~ (Repealed.)

~~A. The provider shall maintain written documentation of each screening performed, including:~~

~~1. Date of initial contact;~~

~~2. Name, age, and gender of the individual;~~

~~3. Address and phone number, if applicable;~~

~~4. Presenting needs or situation to include psychiatric/medical problems, current medications and history of medical care;~~

~~5. Name of screening employee or contractor;~~

~~6. Method of screening;~~

~~7. Screening recommendation; and~~

~~8. Disposition of individual.~~

~~B. The provider shall retain documentation for each screening. For individuals not admitted, documentation shall be retained for six months. Documentation shall be included in the individual's record if the individual is admitted.~~

12VAC35-105-645. Initial contacts, screening, admission, assessment, service planning, orientation, and discharge.

A. The provider shall [~~develop and~~] implement policies and procedures for initial contacts and screening, admissions, and referral of individuals to other services and designate staff to perform these activities.

B. The provider shall maintain written documentation of an individual's initial contact and screening prior to his admission including the:

1. Date of contact;

2. Name, age, and gender of the individual;

3. Address and telephone number of the individual, if applicable;

4. Reason why the individual is requesting services; and

5. Disposition of the individual including his referral to other services for further assessment, placement on a waiting list for service, or admission to the service.

C. The provider shall assist individuals who are not admitted to identify other appropriate services.

D. The provider shall retain documentation of the individual's initial contacts and screening for six months. Documentation shall be included in the individual's record if the individual is admitted to the service.

12VAC35-105-650. Assessment policy.

A. The provider shall ~~document~~ [~~develop and~~] implement ~~an~~ a written assessment policy. The policy shall define how assessments will be [conducted and] documented.

~~B. The provider shall conduct an assessment to identify an individual's physical, medical, behavioral, functional, and social strengths, preferences and needs, as applicable. The assessment shall address:~~

~~1. Onset/duration of problems;~~

~~2. Social/behavioral/developmental/family history;~~

~~3. Employment/vocation/educational background;~~

~~4. Previous interventions/outcomes;~~

~~5. Financial resources and benefits;~~

~~6. Health history and current medical care needs;~~

~~7. Legal status, including guardianship, commitment and representative payee status, and relevant criminal charges or convictions, probation or parole status;~~

~~8. Daily living skills;~~

~~9. Social/family supports;~~

~~10. Housing arrangements; and~~

~~11. Ability to access services.~~

B. The provider shall [~~solicit the individual's own assessment and shall~~] actively involve the individual and authorized representative, if applicable, in the preparation of initial and comprehensive assessments and in subsequent reassessments. In these assessments and reassessments [,] the provider shall consider the individual's needs, strengths, goals, preferences, and abilities within the individual's cultural context.

C. The assessment policy shall designate employees or contractors who are responsible for conducting assessments. ~~Employees or contractors responsible for assessments~~ These employees or contractors shall have experience in working with the ~~population~~ needs of individuals who are being assessed ~~and with~~, the assessment tool or tools being utilized, and the provision of services that the individuals may require.

~~D. Frequency of assessments.~~

~~1. A preliminary assessment shall be done prior to admission;~~

~~2. The preliminary assessment shall be updated and finalized during the first 30 days of service prior to completing the individualized services plan. Longer term assessments may be included as part of the individualized services plan. The provider shall document the reason for assessments requiring more than 30 days.~~

~~3. Reassessments shall be completed when there is a need based on the medical, psychiatric or behavioral status of the individual and at least annually.~~

~~E.~~ D. Assessment is an ongoing activity. The provider shall make reasonable attempts to obtain previous assessments [or relevant history].

E. An [~~initial~~] assessment shall be [~~completed~~ initiated] prior to or at admission to the service. With the participation of the individual and the individual's authorized representative, if applicable, the provider shall complete an initial assessment detailed enough to determine whether the individual qualifies for admission and to [~~develop~~ initiate] an [~~initial~~] ISP for those individuals who are admitted to the service. This [~~initial~~] assessment shall assess immediate service, health [,] and safety needs, and at a minimum [~~address~~ include] the individual's:

1. Diagnosis;

2. Presenting needs including the individual's stated needs, psychiatric needs, support needs, and the onset and duration of problems;

3. Current medical problems;

4. Current medications;

5. Current and past substance use or abuse, including co-occurring mental health and substance abuse disorders; and

6. At-risk behavior to self and others.

F. A comprehensive assessment shall update and finalize the initial assessment. The timing for completion of the comprehensive assessment shall be based upon the nature and scope of the service but shall occur no later than [30 days, after admission for providers of mental health and substance abuse services and] 60 days after admission [for providers of mental retardation (intellectual disability) and developmental disabilities services]. It shall address:

1. Onset and duration of problems;

2. Social, behavioral, developmental [,] and family history and supports;

3. Cognitive functioning including strengths and weaknesses;

4. Employment, [~~vocation~~ vocational,] and educational background;

5. Previous interventions and outcomes;

6. Financial resources and benefits;

7. Health history and current medical care needs, to include:

a. Allergies;

b. Recent physical complaints and medical conditions;

c. Nutritional needs;

d. Chronic conditions;

e. Communicable diseases;

f. Restrictions on physical activities if any;

g. Past serious illnesses, serious injuries, and hospitalizations;

h. Serious illnesses and chronic conditions of the individual's parents, siblings, and significant others in the same household; [and]

i. Current and past substance [~~usage~~ use] including alcohol, prescription and nonprescription medications, and illicit drugs [~~; and.~~]

[~~j. Reproductive history including pregnancy status.~~]

8. Psychiatric and substance use issues including current mental health or substance use needs, presence of co-occurring disorders, history of substance use or abuse, and circumstances that increase the individual's risk for mental health or substance use issues;

9. History of abuse, neglect, sexual [~~and~~, or] domestic violence, or trauma including psychological trauma;

10. Legal status including [~~guardianship~~ authorized representative], commitment, and representative payee status;

11. Relevant criminal charges or convictions and probation or parole status;

12. Daily living skills;

13. Housing arrangements;

14. Ability to access services including transportation needs; and

15. As applicable, and in all residential services, fall risk, communication methods or needs, and mobility and adaptive equipment needs.

G. Providers of short-term intensive services including inpatient and crisis stabilization services shall develop policies for completing comprehensive assessments within the time frames appropriate for those services.

H. Providers of non-intensive or short-term services shall meet the requirements for the initial assessment at a minimum. Non-intensive services are services provided in jails, nursing homes, or other locations when access to records and information is limited by the location and nature of the services. Short-term services typically are provided for less than 60 days.

I. Providers may utilize standardized state or federally sanctioned assessment tools that do not meet all the criteria of 12VAC35-105-650 as the initial or comprehensive assessment tools as long as the tools assess the individual's health and safety issues and substantially meet the requirements of this [~~regulation~~ section].

J. Individuals who receive medication-only services shall be reassessed at least annually to determine whether there is a change in the need for additional services and the effectiveness of the medication.

[~~K. The provider shall retain documentation for each assessment for a period of six months. Documentation shall be included in the individual's record if the individual is admitted.~~

~~L. The provider shall assist individuals who are not scheduled for further assessment or who are not admitted to identify other appropriate services.~~]

12VAC35-105-660. Individualized services plan (ISP).

A. The provider shall ~~develop a preliminary individualized services plan for the first 30 days. The preliminary individualized services plan shall be developed and implemented within 24 hours of admission and shall continue in effect until the individualized services plan is developed or the individual is discharged, whichever comes first~~ actively involve the individual and authorized representative, as appropriate, in the development, review, and revision of a person-centered ISP. The individualized services planning process shall be consistent with laws protecting confidentiality, privacy, human rights of individuals receiving services, and rights of minors.

B. The provider shall develop an ~~individualized services plan for each individual as soon as possible after admission but no later than 30 days after admission. Providers of short-term services must develop and implement a policy to develop individualized services plans within a time frame consistent with the expected length of stay of individuals. Services requiring longer term assessments may include the completion of those as part of the individualized services plan as long as all appropriate services are incorporated into the individualized services plan based on the assessment completed within 30 days of admission and the individualized services plan is updated upon the completion of assessment~~ initial person-centered ISP for the first 60 days [for mental retardation (intellectual disability) and developmental disabilities services or for the first 30 days for mental health

and substance abuse services]. This ISP shall be developed and implemented within 24 hours of admission to address immediate service, health, and safety needs and shall continue in effect until the ISP is developed or the individual is discharged, whichever comes first.

~~C. The individualized services plan shall address:~~

~~1. The individual's needs and preferences.~~

~~2. Relevant psychological, behavioral, medical, rehabilitation and nursing needs as indicated by the assessment;~~

~~3. Individualized strategies, including the intensity of services needed;~~

~~4. A communication plan for individuals with communication barriers, including language barriers; and~~

~~5. The behavior treatment plan, if applicable.~~

~~D. The provider shall comply with the human rights regulations in regard to participation in decision making by the individual or legally authorized representative in developing or revising the individualized services plan.~~

~~E. The provider shall involve family members, guardian, or others, if appropriate, in developing, reviewing, or revising, at least annually, the individualized service plans consistent with laws protecting confidentiality, privacy, the human rights of individuals receiving services (see 12VAC35-115-60) and the rights of minors.~~

~~F. Employees or contractors responsible for implementation of an individualized services plan shall demonstrate a working knowledge of the plan's goals, objectives and strategies.~~

~~G. The provider shall designate a person who will develop and implement individualized service plans.~~

~~H. The provider shall implement the individualized services plan and review it at least every three months or whenever there is a revised assessment. These reviews shall evaluate the individual's progress toward meeting the plan's objectives. The goals, objectives and strategies of the individualized services plan shall be updated, if indicated.~~

~~I. The individualized service plan shall be consistent with the CSP for individuals served by the IFDDS Waiver.~~

~~J. In brain injury services, the individualized services plan shall be reassessed and revised more frequently than annually, consistent with the individual's course of recovery.~~

C. The provider shall [~~develop and~~] implement a person-centered comprehensive ISP as soon as possible after admission based upon the nature and scope of services but no later than [30 days after admission for providers of mental health and substance abuse services and] 60 days after admission [for providers of mental retardation (intellectual disability) and developmental disabilities services].

12VAC35-105-665. ISP requirements

A. The comprehensive ISP shall [~~address or include: 1. The~~ be based on the] individual's needs, strengths, abilities, personal preferences, goals, and natural supports [~~;~~ identified in the assessment. The ISP shall include:]

[~~2. A summary of or reference to the assessment;~~

~~3.~~ 1.] Relevant and attainable goals, measurable objectives, and specific strategies for addressing each [~~identifiable~~] need;

[~~4.~~ 2.] Services and supports and frequency of services required to accomplish the goals including relevant psychological, mental health, substance abuse, behavioral, medical, rehabilitation, training, and nursing needs and supports [~~as indicated by the assessment~~];

[~~5.~~ 3.] The role of the individual and others in implementing the service plan;

[~~6.~~ 4.] A communication plan for individuals with communication barriers, including language barriers;

[~~7.~~ 5.] A [~~behavior~~ behavioral] support or treatment plan, if applicable;

[~~8.~~ 6.] A safety plan that addresses identified risks to the individual or to others, including a fall risk plan;

[~~9.~~ 7.] A crisis or relapse plan, if applicable;

[~~10.~~ 8.] Target dates for accomplishment of goals and objectives [~~and estimated duration of ISP~~];

[~~11. Discharge goals, if applicable;~~]

[~~12.~~ 9.] Identification of employees or contractors responsible for coordination and integration of services, including employees of other agencies; and

[~~13.~~ 10.] Recovery plans [, if applicable].

B. The ISP shall be signed and dated at a minimum by the person responsible for implementing the plan and the individual receiving services or the authorized representative. If the signature of the individual receiving services or the authorized representative cannot be obtained [,] the provider shall document his attempt to [~~attain~~ obtain] the necessary signature and the reason why he was unable to obtain it.

C. The provider shall designate a person who will be responsible for developing, implementing, reviewing, and revising each individual's ISP in collaboration with the individual or authorized representative, as appropriate.

D. Employees or contractors who are responsible for implementing the ISP shall demonstrate a working knowledge of the objectives and strategies contained in the individual's current ISP.

E. Providers of short-term intensive services such as inpatient and crisis stabilization services that are typically provided for less than 30 days shall [~~develop and~~] implement a policy to develop an ISP within a timeframe consistent with the length of stay of individuals.

F. The ISP shall be consistent with the plan of care for individuals served by the IFDDS Waiver.

G. When a provider provides more than one service to an individual the provider may maintain a single ISP document that contains individualized objectives and strategies for each service provided.

H. Whenever possible the identified goals in the ISP shall be written in the words of the individual receiving services.

12VAC35-105-670. ~~Individualized services plan requirements.~~ (Repealed.)

~~A. The individualized services plan shall include, at a minimum:~~

~~1. A summary or reference to the assessment;~~

~~2. Goals and measurable objectives for addressing each identified need;~~

~~3. The services and supports and frequency of service to accomplish the goals and objectives;~~

~~4. Target dates for accomplishment of goals and objectives;~~

~~5. Estimated duration of service plan;~~

~~6. Discharge plan, where applicable; and~~

~~7. The employees or contractors responsible for coordination and integration of services, including employees of other agencies.~~

~~B. The individualized services plan shall be signed and dated, at a minimum, by the person responsible for implementing the plan and the individual receiving services or the legally authorized representative. If unable to obtain the signature of the individual receiving services or the legally authorized representative, the provider shall document the reason.~~

12VAC35-105-675. Reassessments and ISP reviews.

A. Reassessments shall be completed at least annually and when there is a need based on the medical, psychiatric, or behavioral status of the individual.

B. The provider shall update the ISP at least annually. The provider shall review the ISP at least every three months [from the date of the implementation of the ISP] or whenever there is a revised assessment based upon the individual's changing needs or goals. These reviews shall evaluate the individual's progress toward meeting the plan's goals and objectives and the continued relevance of the ISP's objectives and strategies. The provider shall update the goals, objectives, and strategies contained in the ISP, if indicated, and implement any updates made.

12VAC35-105-680. Progress notes or other documentation.

The provider shall use signed and dated progress notes or other documentation to document the services provided [~~,~~] and the implementation of [~~and outcomes~~ the goals and objectives] ~~of individualized services plans~~ contained in the ISP.

12VAC35-105-690. Orientation.

A. The provider shall [~~develop and~~] implement a written policy regarding the orientation of individuals and ~~the legally~~ their authorized ~~representative~~ representatives, if applicable to services.

B. ~~At a minimum,~~ As appropriate to the scope and level of services the policy shall require the [provision to individuals and] ~~the legally~~ [authorized] ~~representative of~~ [representatives the] following information~~, as appropriate to the scope and level of services~~:

1. The mission of the provider or service;

2. ~~Confidentiality~~ Service confidentiality practices and protections for individuals receiving services;

3. Human rights policies and protections and instructions on how to report violations;

4. ~~Participation~~ Opportunities for participation in ~~treatment~~ services and discharge planning;

5. Fire safety and emergency preparedness procedures [, if applicable];

6. The provider's grievance procedure;

7. Service guidelines including criteria for [admission to and] discharge or transfer from services;

[~~8. Physical plant or building lay-out;~~

~~9.~~ 8.] Hours and days of operation; ~~and~~

[~~10.~~ 9.] Availability of after-hours service; and

[~~11.~~ 10.] Any charges or fees due from the individual.

C. In addition, individuals receiving treatment services in a correctional ~~facilities will~~ facility shall receive an orientation to the facility's security restrictions.

D. The provider shall document that ~~orientation has been provided to individuals and the legal guardian/authorized representative~~ the individual and authorized representative, if applicable, received an orientation to services.

12VAC35-105-691. Transition of individuals among service [~~locations~~].

A. The provider shall [~~have~~ implement] written procedures that define the process for transitioning an individual between or among services [~~or locations~~] operated by the provider. At a minimum the policy shall address:

1. The process by which the provider will assure continuity of services during and following transition [~~.~~]

2. The participation of the individual [~~and his family~~] or [his] authorized representative, as applicable, in the decision to move and in the planning for transfer;

3. The process and timeframe for transferring the [access to] individual's record and ISP to the destination location;

4. The process and timeframe for [~~transmitting~~ completing] the transfer summary [~~to the destination location service~~]; and

5. The process and timeframe for transmitting [or accessing], where applicable, discharge [~~and admission~~] summaries to the destination [~~location~~ service].

B. The transfer summary shall include at a minimum the following:

[~~1. Description of each service provided at the initial location;~~

~~2. Description of each service to be provided at the destination location;~~

~~3.~~ 1.] Reason for the individual's transfer;

[~~4.~~ 2.] Documentation of involvement by the individual [~~and his family~~] or [his] authorized representative, as applicable, in the decision to and planning for the transfer;

[~~5.~~ 3.] Current psychiatric and [known] medical conditions or issues of the individual and the identity of the individual's health care providers;

[~~6.~~ 4.] Updated progress of the individual in meeting goals and objectives in his ISP;

[~~7.~~ 5.] Emergency medical information;

[~~8.~~ 6.] Dosages of all currently prescribed medications and over-the-counter medications used by the individual [when prescribed by the provider or known by the case manager];

[~~9.~~ 7.] Transfer date; and

[~~10.~~ 8.] Signature of employee or contractor responsible for preparing the transfer summary.

C. The transfer summary may be documented in the individual's progress notes or in information easily accessible within an electronic [health] record.

12VAC35-105-693. Discharge.

A. The provider shall have [written] policies and procedures regarding the discharge or termination of individuals from the service. These policies and procedures shall include medical and clinical criteria for discharge.

B. Discharge instructions shall be provided in writing to the individual [~~and.~~] his authorized representative, [and the successor provider,] as applicable. Discharge instructions shall include at a minimum medications and dosages; names, phone numbers, and addresses of any providers to whom the individual is referred; current medical issues or conditions; and the identity of [the treating] health care providers. [~~This applies to residential and inpatient services only.~~]

C. The provider shall make appropriate arrangements or referrals to all service providers identified in the discharge plan prior to the individual's scheduled discharge date.

D. The content of the discharge plan and the determination to discharge the individual shall be consistent with the ISP and the criteria for discharge.

E. The provider shall document in the individual's service record that the individual, his authorized representative, and his family members, as appropriate, have been involved in the discharge planning process.

F. A written discharge summary shall be completed within 30 days of discharge and shall include at a minimum the following:

1. Reason for the individual's admission to and discharge from the service;

2. Description of the individual's or authorized representative's participation in discharge planning;

3. The individual's current level of functioning or functioning limitations, if applicable;

4. Recommended procedures, activities, or referrals to assist the individual in maintaining or improving functioning and increased independence;

5. The status, location, and arrangements that have been made for future services;

6. Progress made by the individual in achieving goals and objectives identified in the ISP and summary of critical events during service provision;

7. Discharge date;

8. Discharge medications [prescribed by the provider], if applicable;

9. Date the discharge summary was actually written or documented; and

10. Signature of the person who prepared the summary.

Article 3
Crisis Intervention and ~~Clinical~~ Emergencies

12VAC35-105-700. Written policies and procedures for ~~a~~ crisis or ~~clinical~~ emergency interventions; required elements.

A. The provider shall [~~develop and~~] implement written policies and procedures for prompt intervention in the event of a crisis or ~~clinical~~ a behavioral, medical, or psychiatric emergency that ~~occurs~~ may occur during screening and referral ~~or during~~, at admission ~~and~~, or during the period of service provision. ~~A clinical emergency refers to either a medical or psychiatric emergency.~~

B. The policies and procedures shall include:

1. A definition of what constitutes a crisis ~~and clinical~~ or behavioral, medical, or psychiatric emergency;

2. Procedures for ~~stabilization and immediate access to~~ immediately accessing appropriate internal and external resources ~~including a provision for~~. This shall include a provision for obtaining physician and mental health clinical services if the provider's or service's on-call or back-up physician ~~back up~~ or mental health clinical services are not available at the time of the emergency;

3. Employee or contractor responsibilities; and

4. Location of emergency medical information for ~~individuals~~ each individual receiving services, including any advance psychiatric or medical directive or crisis response plan developed by the individual, which shall be readily accessible to employees or contractors on duty in an emergency or crisis.

12VAC35-105-710. Documenting crisis intervention and ~~clinical~~ emergency services.

A. The provider shall develop a method for documenting the provision of crisis intervention and ~~clinical~~ emergency services. Documentation shall include the following:

1. Date and time;

2. ~~Nature~~ Description of the nature of or circumstances surrounding the crisis or emergency;

3. Name of individual;

4. ~~Precipitating~~ Description of precipitating factors;

5. ~~Interventions/treatment~~ Interventions or treatment provided;

6. ~~Employees~~ Names of employees or contractors ~~involved~~ responding to or consulted during the crisis or emergency; and

7. Outcome.

B. If a crisis or ~~clinical~~ emergency involves an individual who is admitted into service, documentation of the crisis intervention ~~documentation~~ or provision of emergency services shall become part of his record.

Article 4
Medical Management

12VAC35-105-720. Health care policy.

A. The provider shall [~~develop and~~] implement a ~~written~~ policy, appropriate to the scope and level of service that addresses provision of adequate and appropriate medical care. This policy shall describe how:

1. Medical care needs will be assessed including circumstances that will prompt the decision to obtain a medical assessment.

2. Individualized services plans will address any medical care needs appropriate to the scope and level of service.

3. Identified medical care needs will be addressed.

[~~4. Substance abuse will be assessed.~~

~~5.~~ 4.] The provider ~~manages~~ will manage medical care needs or ~~responds~~ respond to abnormal findings.

[5. ~~6.~~] The provider ~~communicates~~ will communicate medical assessments and diagnostic laboratory results to ~~individuals~~ the individual and authorized ~~representatives~~ representative, as appropriate.

[6. ~~7.~~] The provider ~~keeps~~ will keep accessible to staff and contractors on duty the names, addresses, and phone numbers of the individual's medical and dental providers.

[7. ~~8.~~] The provider ~~ensures~~ will ensure a means for facilitating and arranging, as appropriate, transportation to medical and dental appointments and medical tests, when services cannot be provided on site.

B. The provider shall [~~establish and~~] implement [written] policies to identify any individuals who are at risk for falls and develop and implement a fall prevention and management plan and program for each at risk individual.

C. Providers of residential or inpatient services shall [~~either~~] provide or arrange for the provision of appropriate medical care. ~~A provider~~ Providers of other services shall define instances when ~~it~~ they shall provide or arrange for appropriate medical and dental care and instances when ~~it~~ they shall refer the individual to appropriate medical care.

D. The provider shall [~~develop, document, and~~] implement [written] infection control measures including the use of universal precautions.

E. The provider shall report outbreaks of infectious diseases to the Department of Health pursuant to § 32.1-37 of the Code of Virginia.

12VAC35-105-730. ~~Medical information.~~ (Repealed.)

~~A. The provider shall develop and implement a medical evaluation or document its ability to obtain a medical evaluation that consists of, at a minimum, a health history and emergency medical information.~~

~~B. A health history shall include:~~

~~1. Allergies;~~

~~2. Recent physical complaints and medical conditions;~~

~~3. Chronic conditions;~~

~~4. Communicable diseases;~~

~~5. Handicaps or restriction on physical activities, if any;~~

~~6. Past serious illnesses, serious injuries and hospitalizations;~~

~~7. Serious illnesses and chronic conditions of the individual's parents, siblings and significant others in the same household;~~

~~8. Current and past drug usage including alcohol, prescription and nonprescription medications, and illicit drugs; and~~

~~9. Sexual health and reproductive history.~~

12VAC35-105-740. Physical examination [for residential and inpatient services].

A. [~~The provider shall develop~~ in consultation with a qualified practitioner and implement ~~a policy on~~ the provision of physical examinations in consultation with a qualified ~~practitioner.~~] Providers of residential [or inpatient] services shall administer or obtain results of physical exams within 30 days of an individual's admission. [The examination must have been conducted within one year of admission to the service.] Providers of inpatient services shall administer physical exams within 24 hours of an individual's admission.

B. A physical examination shall include, at a minimum:

1. General physical condition (history and physical);

2. Evaluation for communicable diseases;

3. Recommendations for further diagnostic tests and treatment, if appropriate;

4. Other examinations that may be indicated~~, if appropriate~~; and

5. The date of examination and signature of a qualified practitioner.

C. Locations designated for physical examinations shall ensure individual privacy.

[~~D. The provider shall make arrangements for the timely receipt of any further diagnostic tests, treatments, or examinations that may be indicated by the physical examination.~~

~~E.~~ D.] The provider shall [~~document~~ review and follow-up with the] results of the physical examination and of any follow-up diagnostic tests, treatments, or examinations in the individual's [~~records~~ record].

12VAC35-105-750. Emergency medical information.

A. The provider shall maintain the following emergency medical information for each individual:

1. If available, the name, address, and telephone number of:

a. The individual's physician; and

b. [~~A relative,~~ The] ~~legally~~ authorized representative [~~,~~] or other person to be notified;

2. Medical insurance company name and policy or Medicaid, Medicare [~~,~~] or CHAMPUS number, if any; ~~and~~

3. Currently prescribed medications and over-the-counter medications used by the individual;

4. Medication and food allergies;

5. History of substance abuse;

6. Significant medical problems or conditions;

7. Significant ambulatory or sensory problems;

8. Significant communication problems; and

~~8.~~ 9. Advance directive, if one exists.

B. Current emergency medical information shall be readily available to employees or contractors wherever program services are provided.

Article 5
Medication Management Services

12VAC35-105-770. Medication management.

A. The provider shall [~~develop and~~] implement written policies addressing:

1. The safe administration, handling, storage, and disposal of medications;

2. The use of medication orders;

3. The handling of packaged medications brought by individuals from home or other residences;

4. Employees or contractors who are authorized to administer medication and training required for administration of medication;

5. The use of professional samples; and

6. The window within which medications can be given in relation to the ordered [or established] time of administration.

B. Medications shall be administered only by persons who are authorized [to do so] by state law.

C. Medications shall be administered only to the individuals for whom the medications are prescribed and shall be administered as prescribed.

D. The provider shall maintain a daily log of all medicines received and refused by each individual. This log shall identify the employee or contractor who administered the medication, the name of the medication and dosage administered or refused, and the time the medication was administered or refused.

E. If the provider administers medications or supervises self-administration of medication in a service, a current medication order for all medications the individual receives shall be maintained on site.

F. The provider shall promptly dispose of discontinued drugs, outdated drugs, and drug containers with worn, illegible, or missing labels according to the applicable regulations of the Virginia Board of Pharmacy.

12VAC35-105-790. Medication administration and storage or pharmacy operation.

A. ~~The~~ A provider responsible for medication administration and medication storage or pharmacy operations shall comply with:

1. The Drug Control Act (§ 54.1-3400 et seq. of the Code of Virginia);

2. The Virginia Board of Pharmacy regulations [~~(18VAC110-20)~~];

3. The Virginia Board of Nursing regulations [~~and Medication Administration Curriculum (18VAC90-20-370 through 18VAC90-20-390)~~]; and

4. Applicable federal laws and regulations relating to controlled substances.

B. ~~The~~ A provider responsible for medication administration and storage or pharmacy operation shall provide in-service training to employees and consultation to individuals ~~or legally~~ and authorized representatives on issues of basic pharmacology including medication side effects.

Article 6
Behavior ~~Management~~ Interventions

12VAC35-105-800. Policies and procedures on behavior ~~management techniques~~ interventions and supports.

A. The provider shall [~~develop and~~] implement [written] policies and procedures that describe the use of behavior ~~management techniques~~ interventions, including [~~, but not limited to,~~] seclusion, restraint, and time out. The policies and procedures shall:

1. Be consistent with applicable federal and state laws and regulations;

2. Emphasize positive approaches to behavior ~~management~~ interventions;

3. List and define behavior ~~management techniques~~ interventions in the order of their relative degree of intrusiveness or restrictiveness and the conditions under which they may be used in each service for each individual;

4. Protect the safety and well-being of the individual at all times, including during fire and other emergencies;

5. Specify the mechanism for monitoring the use of behavior ~~management techniques~~ interventions; and

6. Specify the methods for documenting the use of behavior ~~management techniques~~ interventions.

B. ~~The behavior management policies and procedures shall be developed, implemented, and monitored by employees or contractors trained in behavior management programming~~ Employees and contractors trained in behavior support interventions shall implement and monitor all behavior interventions.

C. Policies and procedures related to behavior ~~management shall be available to individuals, their families, guardians and advocates except that it does not apply to services provided in correctional facilities~~ interventions shall be available to individuals, their families, authorized representatives, and advocates. Notification of policies does not need to occur in correctional facilities.

D. Individuals receiving services shall not discipline, restrain, seclude [,] or implement behavior ~~management techniques~~ interventions on other individuals receiving services.

E. Injuries resulting from or occurring during the implementation of behavior ~~management techniques~~ interventions shall be recorded in the ~~clinical~~ individual's services record and reported to [the assigned human rights advocate and] the employee or contractor responsible for the overall coordination of services.

12VAC35-105-810. Behavioral treatment plan.

A [written] behavioral treatment plan may be developed as part of the individualized services plan in response to behavioral needs identified through the assessment process. A behavioral treatment plan may include restrictions only if the plan has been developed according to procedures outlined in the human rights regulations. ~~Behavioral~~ A behavioral treatment plan shall be developed, implemented, and

monitored by employees or contractors trained in behavioral treatment.

12VAC35-105-820. Prohibited actions.

The following actions shall be prohibited:

1. Prohibition of contacts and visits with [the individual's] attorney, probation officer, placing agency representative, minister or chaplain;

2. Any action that is humiliating, degrading, or abusive;

[~~3. Corporal punishment;~~]

[~~4.~~ 3.] Subjection to unsanitary living conditions;

[~~5.~~ 4.] Deprivation of opportunities for bathing or access to toilet facilities except as ordered by a licensed physician for a legitimate medical purpose and documented in the individual's record;

[~~6.~~ 5.] Deprivation of appropriate services and treatment;

[~~7.~~ 6.] Deprivation of health care;

[~~8.~~ 7.] Administration of laxatives, enemas, or emetics except as ordered by a physician or other professional acting within the scope of his license for a legitimate medical purpose and documented in the individual's record;

[~~9.~~ 8.] Applications of aversive stimuli except as permitted pursuant to other applicable state regulations;

[~~10.~~ 9.] Limitation on contacts with regulators, advocates or staff attorneys employed by the department or the ~~Department for the Rights of Virginians with Disabilities~~ Virginia Office for Protection and Advocacy.

[~~11.~~ 10.] Deprivation of drinking water or food necessary to meet an individual's daily nutritional needs except as ordered by a licensed physician for a legitimate medical purpose and documented in the individual's record;

[~~12.~~ 11.] Prohibition on contacts ~~and~~ or visits with family or ~~legal guardian~~ an authorized representative except as permitted by other applicable state regulations or by order of a court of competent jurisdiction;

[~~13.~~ 12.] Delay or withholding of incoming or outgoing mail except as permitted by other applicable state and federal regulations or by order of a court of competent jurisdiction; and

[~~14.~~ 13.] Deprivation of opportunities for sleep or rest except as ordered by a licensed physician for a legitimate medical purpose and documented in the individual's record.

12VAC35-105-830. Seclusion, restraint, and time out.

A. The use of seclusion, restraint, and time out shall comply with applicable federal and state laws and regulations and be consistent with the provider's policies and procedures.

B. Devices used for mechanical restraint shall be designed specifically for behavior management of human beings in clinical or therapeutic programs.

C. Application of time out, seclusion, [~~and~~ or] restraint shall be documented in the individual's record and [~~, at a minimum,~~] include the following:

1. Physician's order [for seclusion or mechanical restraint or chemical restraint];

2. Date and time;

3. Employees or contractors involved;

4. Circumstances and reasons for use~~,~~ including [~~but not limited to~~] other behavior management techniques attempted;

5. Duration;

6. Type of technique used; and

7. Outcomes, including documentation of debriefing of the individual and staff involved following the incident.

12VAC35-105-840. Requirements for seclusion room.

A. The room used for seclusion shall meet the design requirements for buildings used for detention or seclusion of [~~persons~~ individuals].

B. The seclusion room shall be at least six feet wide and six feet long with a minimum ceiling height of eight feet.

C. The seclusion room shall be free of all protrusions, sharp corners, hardware, fixtures or other devices which may cause injury to the ~~occupant~~ individual.

D. Windows in the seclusion room shall be so constructed as to minimize breakage and otherwise prevent the ~~occupant~~ individual from harming himself.

E. Light fixtures and other electrical receptacles in the seclusion room shall be recessed or so constructed as to prevent the ~~occupant~~ individual from harming himself. Light controls shall be located outside the seclusion room.

F. Doors to the seclusion room shall be at least 32 inches wide, shall open outward and shall contain observation view panels of transparent wire glass or its approved equivalent, not exceeding 120 square inches but of sufficient size for someone outside the door to see into all corners of the room.

G. The seclusion room shall contain only a mattress with a washable mattress covering designed to avoid damage by tearing.

H. The seclusion room shall maintain temperatures appropriate for the season.

I. All space in the seclusion room shall be visible through the locked door, either directly or by mirrors.

~~Article 7~~
~~Continuity of Service and Discharge~~

12VAC35-105-850. ~~Transition of individuals among services.~~ (Repealed.)

~~A. The provider shall have written procedures to define the process for the transition of an individual among services of the provider. At a minimum, the policy will address:~~

~~1. Continuity of service;~~

~~2. Participation of the individual and his family;~~

~~3. Transfer of the individual's record;~~

~~4. Transfer summary; and~~

~~5. Where applicable, discharge and admission summaries.~~

~~B. The transfer summary will include at a minimum:~~

~~1. The originating service;~~

~~2. The destination service;~~

~~3. Reason for transfer;~~

~~4. Current psychiatric and medical condition of the individual;~~

~~5. Updated progress on meeting the goals and objectives of the ISP;~~

~~6. Medications and dosages in use;~~

~~7. Transfer date; and~~

~~8. Signature of employee or contractor responsible for preparing the transfer summary.~~

12VAC35-105-860. ~~Discharge.~~ (Repealed.)

~~A. The provider shall have written policies and procedures regarding the discharge of individuals from the service and termination of services. These policies and procedures shall include medical or clinical criteria for discharge.~~

~~B. Discharge instructions shall be provided, in writing, to the individual or his legally authorized representative or both. Discharge instructions shall include, at a minimum, medications and dosages, phone numbers and addresses of any providers to whom the individual is referred, current medical issues, conditions, and the identity of health care providers. This regulation applies to residential and inpatient services.~~

~~C. The provider shall make appropriate arrangements or referrals to all services identified by the discharge plan prior to the individual's scheduled discharge date.~~

~~D. Discharge planning and discharge shall be consistent with the individualized services plan and the criteria for discharge.~~

~~E. The individual's, the individual's legally authorized representative and the individual's family's involvement in discharge planning shall be documented in the individual's service record.~~

~~F. A written discharge summary shall be completed within 30 days of discharge and shall include, at a minimum, the:~~

~~1. Reason for admission and discharge;~~

~~2. Individual's participation in discharge planning;~~

~~3. Individual's level of functioning or functional limitations, if applicable;~~

~~4. Recommendations on procedures, activities, or referrals to assist the individual in maintaining or improving functioning and increased independence and the status, location and arrangements for future services that have been made;~~

~~5. Progress made achieving the goals and objectives identified in the individualized services plan and summary of critical events during service provision;~~

~~6. Discharge date;~~

~~7. Discharge medications, if applicable;~~

~~8. Date the discharge summary was actually written/documented; and~~

~~9. Signature of person who prepared summary.~~

Part V
Records Management

12VAC35-105-870. [~~Written~~ Paper] and electronic records management policy.

A. The provider shall [~~develop and~~] implement a written [and electronic] records management policy that ~~shall describe~~ describes confidentiality, accessibility, security, and retention of [paper and electronic] records pertaining to individuals, including:

1. Access and limitation of access, duplication ~~and~~, or dissemination of individual information ~~only~~ to persons ~~legally~~ who are authorized to access such information according to federal and state laws;

2. Storage, processing [,] and handling of active and closed records;

3. Storage, processing [,] and handling of electronic records;

4. Security measures ~~to~~ that protect records from loss, unauthorized alteration, inadvertent or unauthorized access, disclosure of information, and transportation of

records between service sites; ~~physical and data security controls shall exist for electronic records;~~

5. Strategies for service continuity and record recovery from interruptions that result from disasters or emergencies including contingency plans, electronic or manual back-up systems, and data retrieval systems;

6. Designation of the person responsible for records management; and

~~6.~~ 7. Disposition of records in the event that the service ceases operation. If the disposition of records ~~would involve~~ involves a transfer to another provider, the provider shall have a written agreement with that provider.

B. The records management policy shall be consistent with applicable state and federal laws and regulations including:

1. Section 32.1-127.1:03 of the Code of Virginia;

2. 42 USC § 290dd;

3. 42 CFR Part 2; and

4. The Health Insurance Portability and Accountability Act (Public Law 104-191 ~~, 42~~ [~~45 USC § 300gg et seq.~~]) and implementing regulations ~~(42 CFR Part 146)~~ (45 CFR Parts 160, 162, and 164).

12VAC35-105-880. Documentation policy.

A. The provider shall define, by policy, all records it maintains that address an individual's care and treatment and what each record contains.

B. The provider shall define, by policy, and implement a system of documentation ~~which~~ that supports appropriate service planning, coordination, and accountability. At a minimum this policy shall outline:

1. The location of the individual's record;

2. Methods of access by employees or contractors to the individual's record; and

3. Methods of updating the individual's record by employees or contractors including the frequency and format of updates.

C. Entries in the individual's record shall be current, dated, and authenticated by the ~~person~~ persons making the ~~entry~~ entries. [~~Errors~~ For paper records, errors] shall be corrected by striking through [and initialing] the incorrect information [~~and initialing the correction~~]. If records are electronic, the provider shall [~~develop and~~] implement a written policy ~~to identify~~ [to include the identification of errors and corrections ~~on the identification of corrections~~] ~~of~~ to the record.

12VAC35-105-890. Individual's service record.

A. There shall be a [~~single,~~] separate primary record for each individual [~~or family~~] admitted for service. A separate record shall be maintained for each family member who is receiving individual treatment.

B. All individuals admitted to the service shall have identifying information ~~on the face sheet~~ readily accessible in the individual's service record. Identifying information ~~on a standardized face sheet or sheets~~ shall include the following:

1. Identification number unique for the individual;

2. Name of individual;

3. Current residence, if known;

4. Social security number;

5. Gender;

6. Marital status;

7. Date of birth;

8. Name of ~~legal guardian or~~ authorized representative, if applicable;

9. Name, address, and telephone number for emergency contact;

10. Adjudicated legal incompetency or legal incapacity, if applicable; and

11. Date of admission to service.

C. In addition ~~to the face sheet,~~ an individual's service record shall contain, at a minimum:

1. Screening documentation;

2. Assessments;

3. Medical evaluation, as applicable to the service;

4. Individualized services plans and reviews;

5. Progress notes; and

6. A discharge summary, if applicable.

12VAC35-105-900. Record storage and security.

A. When not in use, active and closed [paper] records shall be stored in a locked cabinet or room.

B. Physical and data security controls shall exist ~~for~~ to protect electronic records.

12VAC35-105-910. Retention of individual's service records.

[~~A. An~~ Unless otherwise specified by state or federal requirements, the The] provider shall retain an individual's service ~~records shall be kept~~ record for [~~a minimum of three years after his discharge~~ date or ~~date of last contact unless otherwise specified by state or federal requirements~~ the time period specified by state or federal requirements].

[~~B. Permanent information kept on each individual shall include~~ The provider shall retain the following individual information permanently:

~~1. Individual's name;~~

~~2. Social security number;~~

~~3. Date of individual's birth;~~

~~4. Dates of admission and discharge, and~~

~~5. Name and address of legal guardian~~ authorized ~~representative, if any.~~]

Part VI
Additional Requirements for Selected Services

Article 1
[Medication Assisted Treatment ( ] Opioid Treatment Services [ )]

12VAC35-105-925. Standards for the evaluation of [~~the need for~~] new licenses for providers of services to [~~persons~~ individuals] with opioid addiction.

A. Applicants requesting an initial license to provide a ~~new~~ service for the treatment of opioid addiction through the use of methadone or any other opioid treatment medication or controlled substance shall supply information to ~~demonstrate~~ the department that demonstrates the [~~need for, and~~] appropriateness of [~~,~~] the proposed service in accordance with this section.

[~~B. Applicants shall demonstrate that the geographic and demographic parameters of the service area are reasonable and the proposed service is expected to serve a sufficient number of individuals to justify the service as documented in subsection D of this section. For purposes of demonstrating need, applicants shall define a service area that is located entirely in Virginia and does not extend more than 100 miles from the proposed location of the service. Applicants also shall identify the number of individuals they seek to be licensed to serve.~~

~~C. Applicants shall submit admission policies that give priority to individuals residing in the service area for admission and placement on waiting lists.~~

~~D. Applicants shall demonstrate that there are persons residing in their service areas who have an opioid addiction who would benefit from the proposed service. The following information may be used by the applicant to document that individuals in the service area are known or reasonably expected to need the proposed service:~~

~~1. Numbers of persons on waiting lists for admission to any existing opioid addiction or other public substance abuse treatment program in the service area for the most recent available 12-month period;~~

~~2. Numbers of opioid use disorder cases (e.g., overdoses) originating from the proposed service area that have been treated in hospital emergency rooms for the most recent available 12-month period;~~

~~3. Projections of the number of persons in the service area who are likely to obtain services for opioid addiction, based on drug use forecasting data;~~

~~4. Data reported on suicidal and accidental deaths related to opioid use in the proposed service area for the most recent available 12-month period;~~

~~5. Data regarding arrests from local law enforcement officials in the proposed service area related to illicit opioid activities;~~

~~6. Data on communicable diseases for the proposed service area related to injection drug abuse (e.g. HIV, AIDS, TB, and Hepatitis B and C);~~

~~7. Data on the availability of any evidence-based alternative service or services that have been proven effective in the treatment of opioid addiction and that are accessible to persons within the proposed service area, including services provided by physicians' offices; and~~

~~8. Letters of support from citizens, governmental officials, or health care providers, that indicate that there are conditions or problems associated with substance abuse in the community that demonstrate a need for opioid treatment services in the service area.~~

~~E. The department shall determine whether a need exists for the proposed service based on the documentation provided in accordance with subsection D of this section and the consideration of the following standards:~~

~~1. Whether there are a sufficient number of persons in the proposed service area who are likely to need the specific opioid treatment service that the applicant intends to provide;~~

~~2. Whether the data indicate that evidence-based service capacity in the service area is not responsive to or sufficient enough to meet the needs of individuals with opioid addiction; and~~

~~3. Whether there is documentation of support to confirm the need for the proposed service in the proposed service area.~~

~~F.~~ B.] The proposed site of the service shall comply with § 37.2-406 of the Code of Virginia and, with the exception of services that are proposed to be located in Planning District 8, shall not be located within one-half mile of a public or private licensed day care center or a public or private K-12 school.

[~~G.~~ C.] In jurisdictions without zoning ordinances, the department shall request that the local governing body advise it as to whether the proposed site is suitable for and

compatible with use as an office and the delivery of health care services. The department shall make this request when it notifies the local governing body of a pending application.

[~~H.~~ D.] Applicants shall demonstrate that the building or space to be used to provide the proposed service is suitable for the treatment of opioid addiction by submitting documentation of the following:

1. The proposed site complies with the requirements of the local building regulatory entity;

2. The proposed site complies with local zoning laws or ordinances, including any required business licenses;

3. In the absence of local zoning ordinances, the proposed site is suitable for and compatible with use as offices and the delivery of health care services;

4. In jurisdictions where there are no parking ordinances, the proposed site has sufficient off-street parking to accommodate the needs of the individuals being served and prevent the disruption of traffic flow;

5. The proposed site can accommodate individuals during periods of inclement weather;

6. The proposed site complies with the Virginia Statewide Fire Prevention Code; and

7. The applicant has a written plan to ensure security for storage of methadone at the site, which complies with regulations of the Drug Enforcement Agency (DEA), and the Virginia Board of Pharmacy.

[~~I.~~ E.] Applicants shall submit information to demonstrate that there are sufficient personnel available to meet the following staffing requirements and qualifications:

1. The program director shall be licensed or certified by the applicable Virginia health regulatory board or by a nationally recognized certification board [~~,~~] or eligible for this license or certification with relevant training, experience, or both, in the treatment of [~~persons~~ individuals] with opioid addiction;

2. The medical director shall be a board-certified addictionologist or have successfully completed or will complete within one year [~~,~~] a course of study in opiate addiction that is approved by the department;

3. A minimum of one pharmacist;

4. Nurses;

5. Counselors shall be licensed or certified by the applicable Virginia health regulatory board or by a nationally recognized certification board [~~,~~] or eligible for this license or certification; and

6. Personnel to provide support services.

[~~J.~~ F.] Applicants shall submit a description for the proposed service that includes:

1. Proposed mission, philosophy, and goals of the provider;

2. Care, treatment, and services to be provided, including a comprehensive discussion of levels of care provided and alternative treatment strategies offered;

3. Proposed hours and days of operation;

4. Plans for on-site security; and

5. A diversion control plan for dispensed medications, including policies for use of drug screens.

[~~K.~~ G.] Applicants shall, in addition to the requirements of 12VAC35-105-580 C 2, provide documentation of their capability to provide the following services and support directly or by arrangement with other specified providers when such services and supports are (i) requested by an individual being served or (ii) identified as an individual need, based on the assessment conducted in accordance with 12VAC35-105-60 B and included in the individualized services plan:

1. Psychological services;

2. Social services;

3. Vocational services;

4. Educational services; and

5. Employment services.

[~~L.~~ H.] Applicants shall submit documentation of contact with community services boards or behavioral health authorities in their service areas to discuss [~~its~~ their] plans for operating in the area and to develop joint agreements, as appropriate.

[~~M.~~ I.] Applicants shall provide policies and procedures that [~~require every six months~~] each individual served to be assessed [every six months] by the treatment team to determine if that individual is appropriate for safe and voluntary medically supervised withdrawal, alternative therapies including other medication assisted treatments, or continued federally approved pharmacotherapy treatment for opioid addiction.

[~~N.~~ J.] Applicants shall submit policies and procedures describing services they will provide to individuals who wish to discontinue opioid treatment services.

[~~O.~~ K.] Applicants shall provide assurances that the service will have a community liaison responsible for developing and maintaining cooperative relationships with community organizations, other service providers, local law enforcement, local government officials, and the community at large.

[~~P.~~ L.] The department [~~, including the Office of Licensing, Office of Human Rights, or Office of Substance~~

~~Abuse Services,~~] shall conduct announced and unannounced reviews and complaint investigations~~,~~ in collaboration with the ~~state methadone authority,~~ Virginia Board of Pharmacy~~,~~ and DEA to determine compliance with the regulations.

12VAC35-105-930. Registration, certification or accreditation.

A. The opioid treatment service shall maintain current registration or certification with:

1. The ~~Federal~~ federal Drug Enforcement Administration;

2. The federal Department of Health and Human Services; and

3. The Virginia Board of Pharmacy.

B. ~~If required by federal regulations, a~~ A provider of opioid treatment services shall [~~be required to~~] maintain accreditation with an entity approved under federal regulations.

12VAC35-105-940. Criteria for involuntary termination from treatment.

A. The provider shall establish criteria for involuntary termination from treatment that describe the rights of the individual receiving services and the responsibilities and rights of the provider.

B. The provider shall establish a grievance procedure as part of the rights of the individual.

C. On admission, the individual shall be given a copy of the criteria and shall sign a statement acknowledging receipt of same. The signed acknowledgement shall be maintained in the individual's record.

D. Upon admission and annually all individuals shall sign an authorization for disclosure of information to allow programs access to the Virginia Prescription Monitoring System. Failure to comply shall be grounds for nonadmission to the program.

12VAC35-105-950. Service operation schedule.

A. The service's days of operation shall meet the needs of the ~~population~~ individuals served. If the service dispenses or administers a medication requiring daily dosing, the service shall operate seven days a week, 12 months a year, except for official state holidays. Prior approval from the state methadone authority shall be required for additional closed days.

B. The service may close on Sundays if the following criteria are met:

1. The provider develops and implements policies and procedures that address recently inducted individuals receiving services, individuals not currently on a stable dose of medication, patients that present noncompliance treatment behaviors, and individuals who previously picked up [~~take-homes~~ take-home medications] on Sundays, security of take-home [medication] doses, and health and safety of individuals receiving services.

2. The provider receives prior approval from the state methadone authority for Sunday closings.

3. Once approved, the provider shall notify individuals receiving services in writing at least 30 days in advance of their intent to close on Sundays. The notice shall address the risks to the individuals and the security of take-home medications. All individuals shall receive an orientation addressing take-home policies and procedures, and this orientation shall be documented in the [~~patient~~ individual's] record prior to receiving take-home medications.

4. The provider shall establish procedures for emergency access to dosing information 24 hours a day, seven days a week. This information may be provided via an answering service, pager, or other electronic measures. Information needed includes the individual's last dosing time and date, and dose.

C. Medication dispensing hours shall include at least two hours each day of operation outside normal working hours, i.e., before 9 a.m. and after 5 p.m. The state methadone authority may approve an alternative schedule if that schedule meets the needs of the population served.

12VAC35-105-960. Physical examinations.

A. The individual shall have a complete physical [~~evaluation~~ examination] prior to admission to the service unless the individual is transferring from another licensed opioid agonist service. [~~A full physical examination, including the~~ The] results of serology and other tests [~~,~~] shall be [~~completed~~ available] within 14 days of admission.

B. Physical exams of each individual shall be completed annually or more frequently if there is a change in the individual's physical or mental condition.

C. The provider shall maintain the report of the individual's physical examination in the individual's service record.

D. On admission, all individuals shall be [~~tested~~ offered testing] for AIDS/HIV. The individual may sign a notice of refusal without prejudice.

E. The provider shall coordinate treatment services for individuals who are prescribed benzodiapines and prescription narcotics with the treating physician. The coordination shall be the responsibility of the provider's physician and shall be documented.

12VAC35-105-970. Counseling sessions.

The provider shall conduct face-to-face counseling sessions (either individual or group) at least every two weeks for the first year of an individual's treatment and every month in the

second year of the individual's treatment. After two years, the number of face-to-face counseling sessions that an individual receives shall be based on the individual's progress in treatment. ~~Absences~~ The failure of an individual to participate in counseling sessions shall be addressed as part of the overall treatment process.

12VAC35-105-980. Drug screens.

A. The provider shall perform at least eight random drug screens during a 12-month period unless the conditions in subdivision B of this subsection apply;

B. Whenever an individual's drug screen indicates continued illicit drug use or when clinically and environmentally indicated, random drug screens shall be performed weekly.

C. Drug screens shall be analyzed for opiates, methadone (if ordered), benzodiazepines [,] and cocaine. In addition, drug screens for other drugs ~~with~~ that have the potential for addiction shall be performed when clinically and environmentally indicated.

D. The provider shall [~~develop and~~] implement a [written] policy on how the results of drug screens shall be used to direct treatment.

12VAC35-105-990. Take-home medication.

A. Prior to dispensing regularly scheduled take-home medication, the provider shall ensure the individual demonstrates a level of current lifestyle stability as evidenced by the following:

1. Regular clinic attendance, including dosing and participation in counseling or group sessions;

2. Absence of recent alcohol abuse and [~~other~~] illicit drug use;

3. Absence of significant behavior problems; ~~and~~

4. Absence of recent criminal activities, charges [,] or convictions;

5. Stability of the individual's home environment and social relationships;

6. Length of time in treatment;

7. Ability to assure take-home medications are safely stored; and

8. Demonstrated rehabilitative benefits of take-home medications outweigh the risks of possible diversion.

B. The provider shall educate the individual on the safe transportation and storage of take-home medication.

12VAC35-105-1000. Preventing duplication of medication services.

To prevent duplication of opioid medication services to an individual, the provider shall ~~have~~ [~~develop and~~] implement a [written] policy and ~~implement~~ procedures ~~to contact~~ for contacting every opioid treatment service within a 50-mile radius before admitting an individual.

12VAC35-105-1010. Guests.

A. ~~No medication shall be dispensed~~ The provider shall not dispense medication to any guest unless the guest has been receiving such medication services from another provider and documentation from ~~such~~ that provider has been received prior to dispensing medication.

B. Guests may receive medication for up to 28 days. To continue receiving medication after 28 days, the guest must be admitted to the service. Individuals receiving guest medications as part of a residential treatment service may exceed the 28-day maximum time limit.

12VAC35-105-1020. Detoxification prior to involuntary discharge.

~~Individuals~~ The provider shall give an individual who ~~are~~ is being involuntarily discharged ~~shall be given~~ an opportunity to detoxify from opioid agonist medication not less than 10 days or not more than 30 days prior to his discharge from the service, unless the state methadone authority has granted an exception.

12VAC35-105-1040. Emergency preparedness plan.

The provider's emergency preparedness plan shall include provision for the continuation of opioid treatment in the event of an emergency or natural disaster.

12VAC35-105-1050. Security of opioid agonist medication supplies.

A. At a minimum, the provider shall secure opioid agonist medication supplies ~~shall be secured as follows:~~ by restricting access to medication areas to medical or pharmacy personnel.

~~1. Admittance to the medication area shall be restricted to medical or pharmacy personnel;~~

~~2.~~ B. ~~Medication inventory shall be reconciled~~ The provider shall reconcile the medication inventory monthly~~; and~~.

~~3.~~ C. ~~Inventory~~ The provider shall keep inventory records, including the monthly reconciliation, ~~shall be kept~~ for three years.

~~B.~~ D. The provider shall maintain a current plan to control the diversion of medication to unprescribed or illegal uses.

Article 2
[Medically] Managed Withdrawal Services

12VAC35-105-1055. Description of level of care provided.

In the service description the provider shall describe the level of services and the medical management provided.

~~Article 2~~
~~Social Detoxification Services~~

12VAC35-105-1060. Cooperative agreements with community agencies.

The provider shall establish cooperative agreements with other community agencies to accept referrals for treatment, including provisions for physician coverage if not provided on-site, and emergency medical care. The agreements shall clearly outline the responsibility of each party.

12VAC35-105-1080. Direct-care training for providers of detoxification services.

A. The provider shall document staff training in the areas of:

1. Management of withdrawal; and

2. First responder training~~; or~~.

~~3. First aid and CPR training.~~

B. ~~New employees or contractors shall be trained within 30 days of employment.~~ Untrained employees or contractors shall not be solely responsible for the care of individuals.

12VAC35-105-1090. Minimum number of employees or contractors on duty.

In detoxification service locations, at least two employees or contractors shall be on duty at all times. If the location is within or contiguous to another service location, at least one employee or contractor shall be on duty at the location with trained backup employees or contractors immediately available. In other managed withdrawal settings the number of staff on duty shall be appropriate for the services offered and individuals served.

12VAC35-105-1100. Documentation.

Employees or contractors on each shift shall document services provided and significant events in the individual's record ~~on each shift~~.

12VAC35-105-1110. Admission assessments.

During the admission process, providers of ~~detoxification~~ managed withdrawal services shall:

1. Identify individuals with a high-risk for medical complications or who may pose a danger to themselves or others;

2. Assess substances used and time of last use;

3. Determine time of last meal;

4. Administer a urine screen;

~~6.~~ 5. Analyze blood alcohol content or administer a breathalyzer; and

~~7.~~ 6. Record vital signs.

Article 3
Services in Department of Corrections Correctional Facilities

12VAC35-105-1140. Clinical and security coordination.

A. The provider shall have formal and informal methods of resolving procedural and programmatic issues regarding individual care arising between the clinical and security employees or contractors.

B. The provider shall demonstrate ongoing communication between clinical and security employees to ensure individual care.

C. The provider shall provide cross-training for the clinical and security employees or contractors that includes:

1. Mental health, mental retardation (intellectual disability), and substance abuse education;

2. Use of clinical and security restraints; and

3. Channels of communication.

D. Employees or contractors shall receive periodic in-service training, and have knowledge of and be able to demonstrate the appropriate use of clinical and security restraint.

E. Security and behavioral assessments shall be completed at the time of admission to determine service eligibility and at least weekly for the safety of individuals, other persons, employees, and visitors.

F. Personal grooming and care services for individuals shall be a cooperative effort between the clinical and security employees or contractors.

G. Clinical needs and security level shall be considered when arrangements are made regarding privacy for individual contact with family and attorneys.

H. Living quarters shall be assigned on the basis of the individual's security level and clinical needs.

I. An assessment of the individual's clinical condition and needs shall be made when disciplinary action or restrictions are required for infractions of security measures.

J. Clinical services consistent with the individual's condition and plan of treatment shall be provided when security detention or isolation is imposed.

12VAC35-105-1150. Other requirements for correctional facilities.

A. Group bathroom facilities shall be partitioned between toilets and urinals to provide privacy.

B. If uniform clothing is required, the clothing shall be properly fitted, climatically suitable, durable, and presentable.

C. Financial compensation for work performed shall be determined by the Department of Corrections. Personal

housecleaning tasks may be assigned without compensation to the individual.

D. The use of audio equipment, such as televisions, radios, and record players, shall not interfere with therapeutic activities.

E. Aftercare planning for individuals nearing the end of incarceration shall include a provision for continuing medication and follow-up services with area community services to facilitate successful reintegration into the community including specific appointment provided to the inmate no later than the day of release.

Article 4
Sponsored Residential Homes Services

12VAC35-105-1160. Sponsored residential home information.

Providers of sponsored residential home services shall maintain the following information:

1. Names and ages of residential sponsors;

2. Date of sponsored residential home agreement;

3. The maximum number of individuals that can be placed in the home at a given time;

4. Names and ages of all other individuals who are not receiving services~~,~~ but are residing in a sponsored residential home;

5. Address and telephone number of the sponsored residential home; and

6. ~~All~~ Names of all staff employed in the home, including on-call and substitute staff.

12VAC35-105-1170. Sponsored residential home agreements.

A. The provider shall [~~develop and~~] maintain a written agreement with residential home sponsors. Sponsors are ~~individuals~~ persons who provide the home where the service is located and are directly responsible for the provision of services. The agreement shall include the:

1. ~~Be available for inspection by the licensing specialist; and~~ Provider's responsibilities;

2. ~~Include a provision for granting the right of entry to state licensing specialists or human rights advocates to investigate complaints.~~ Sponsor's responsibilities;

3. Scope of services;

4. Supervision;

5. Compensation;

6. Training; and

7. Reporting requirements and procedures.

B. The agreement shall be available for inspection by the licensing specialist and shall include a provision for granting the right of entry to state licensing specialists or human rights advocates to conduct inspections.

12VAC35-105-1180. Sponsor qualification and approval process.

A. The provider shall evaluate and certify each sponsored residential ~~homes~~ home other than his own through face-to-face interviews, home ~~visits~~ inspections, and other information documenting compliance with this [~~regulation~~ section]. The provider shall submit the certification form to the department before individuals are placed in the home and ensure that the following requirements are met annually.

B. The provider shall certify and document that ~~all~~ each sponsored residential ~~homes meet~~ home meets the criteria for physical environment and residential services [~~designated~~] in these regulations.

C. The provider shall document the ability of the sponsored ~~staff's ability~~ residential home staff to meet the needs of the individuals placed in the home by assessing and documenting:

1. The ~~sponsored staff's~~ ability of the [sponsor or any] staff to communicate and understand individuals receiving services;

2. The ~~sponsored staff's~~ ability of the [sponsor or any] staff to provide the care, treatment, training, or habilitation for ~~individual~~ individuals receiving services in the home;

3. The abilities of all members of the sponsored household to accept individuals with disabilities and their disability-related characteristics, especially the ability of children in the household to adjust to nonfamily members living with them; ~~and~~

4. The financial capacity of the sponsor to meet the sponsor's own expenses for up to 90 days, independent of payments received for residents living in the home~~.~~; and

5. The education, qualifications, and experience of the [sponsor or] staff with the individuals served including Virginia Department of Motor Vehicles driving record, tuberculosis screening, first-aid and CPR certification, and completion of medication administration and behavior [~~management~~] interventions training.

D. The provider shall obtain three job-related references, past licensing history, criminal background checks, and a search of the registry of founded complaints of child abuse and neglect maintained by the Department of Social Services for the sponsor and all ~~adults in the home who are~~ staff. ~~The provider must develop policies for obtaining references, background and registry checks for all adults in the home who are not staff and not the individuals being served.~~

E. The provider shall [~~develop and~~] implement written policies for obtaining references, criminal background checks, and registry checks for all adults in the home who are neither staff nor individuals being served. The policy shall indicate what action the provider will take if the results indicate that a member of the sponsor family has been convicted of a barrier crime or fails to meet the requirements of this regulation should an ineligible result be received.

F. ~~Sponsored~~ The sponsored residential home ~~members~~ shall submit to the provider the results of a physical and mental health examination of family members when requested by the provider based on indications of a physical or mental health ~~problem~~ issue.

~~F.~~ G. Sponsored residential homes shall not also operate as group homes or Department of Social Services approved homes or foster homes.

H. The provider shall submit the name, address, and certification of the sponsored residential home to the department prior to adding the home. The provider shall submit the name and address of the sponsored residential home to the department prior to closing the home. The provider shall submit a service modification when approving homes more than 100 miles from the previously approved homes.

12VAC35-105-1190. Sponsored residential home service policies.

A. The provider shall [~~develop and~~] implement [written] policies to provide orientation and supportive services to ~~sponsored~~ the sponsored residential home staff specific to ~~individual~~ the needs of the individuals receiving services.

B. The provider shall [~~develop and~~] implement a training plan for the ~~sponsored~~ sponsor staff consistent with ~~resident~~ the needs of the individuals receiving services.

C. The provider shall specify staffing arrangements in all sponsored residential homes, including on-call and substitute care arrangements.

D. The provider shall [~~develop and~~] implement a written policy on managing, monitoring, and supervising sponsored residential homes. This policy shall address changes in supervision arrangements as the number of homes increase.

E. The provider shall conduct ~~at least semi-annual unannounced visits to~~ inspections of each sponsored residential ~~homes~~ home other than his own. Inspections shall be performed at least on a quarterly basis during the year with at least two being unannounced inspections.

F. On an on-going basis and at least annually, the provider shall review and document compliance ~~of~~ by each sponsored residential ~~homes~~ home and ~~sponsors~~ sponsor with regulations related to sponsored residential homes.

G. The provider shall develop written policies ~~regarding termination of~~ for terminating a sponsored residential home.

H. The provider shall document that all residents or their authorized representatives are provided the opportunity to choose a new placement when the current placement ends. Prior to moving an individual to another placement the provider shall conduct and document a meeting to include the individual and [~~their~~ his] authorized representative, if applicable, case manager, the current sponsor, and a receiving placement staff, if possible.

12VAC35-105-1200. Supervision.

A. The provider shall have a supervisor for every [~~20~~ 15] sponsored residential homes where individuals are residing.

B. A responsible adult shall be available to provide supervision to the individual as specified in the individualized service plan.

~~B.~~ C. Any member of the sponsor family who transports individuals receiving services must have a valid driver's license and automobile liability insurance. The vehicle used to transport individuals receiving services shall have a valid registration and inspection sticker.

~~C.~~ D. The sponsor shall inform the provider in advance of any anticipated additions or changes in the sponsored residential home or as soon as possible after an unexpected change occurs.

E. In addition to the current reporting requirements the sponsor shall report all hospitalizations of [~~the~~] individuals being served to the provider and the individual's case manager within 24 hours.

12VAC35-105-1210. Sponsored residential home service records.

Providers of sponsored residential home services shall maintain [the following] records on each sponsored residential home [~~, which shall include~~]:

1. Documentation of three references for the owner of the sponsor home;

2. Criminal background checks and results of the search of the registry of founded complaints of child abuse and neglect ~~on~~ for all ~~adults who are staff~~ adult employees in the home;

3. Orientation and training provided by the provider to the sponsor and employees;

4. ~~A~~ The log of provider ~~visits to each~~ inspections of the sponsored residential home including the date, the ~~staff person visiting~~ employee conducting the inspection, the purpose of the ~~visit~~ inspection, and a description of any significant events [or findings]; and

5. The ~~sponsor will maintain a~~ daily log maintained by the sponsor of significant events related to individuals receiving services.

12VAC35-105-1220. Regulations pertaining to ~~employees~~ staff.

Providers ~~will~~ shall certify and document compliance of sponsors with regulations pertaining to ~~employees~~ staff.

12VAC35-105-1230. Maximum number of beds or occupants in sponsored residential home.

The maximum number of individuals served in a sponsored residential home ~~beds~~ is two. The maximum number of occupants in a sponsored residential home is seven.

12VAC35-105-1235. Sponsored residential home services for children.

In addition, the following requirements shall be met for homes serving children:

1. The provider shall develop a service description based upon evidence-based practices or an accepted therapeutic model of mental health, [~~mental retardation (intellectual disability),~~ developmental or] substance abuse [services], or brain injury care for children.

2. The provider shall use a treatment team model consisting of staff who provide intensive support and consultation to the sponsor parents.

3. Weekly team meetings and supervision shall be held with the sponsor parent or parents to review progress on each case, review the daily behavioral information collected, and adjust the child's individualized services plan.

4. The sponsor parent or parents shall keep a daily log of behavioral and other child specific information and be available for daily Monday through Friday contact from the provider.

5. The sponsor parent or parents shall receive 25 hours per year of in-service training pertaining to providing services for the child they serve in addition to the training otherwise required in these regulations. The sponsor parent or parents shall also participate in ongoing training at least once a quarter.

6. The provider is not considered a child placing agency. Children are placed with the provider by licensed child placing agencies, local departments of social services, or parents.

7. The sponsor parent or parents shall be at least 25 years old.

8. The sponsor parent or parents shall be able to provide care and supervision during nonschool hours.

9. The provider shall have access through directly providing it or developing agreements for 24-hour emergency mental health care for children [served] with serious emotional disturbances [~~served~~].

Article 5
Case Management Services

12VAC35-105-1240. Service requirements for providers of case management services.

~~A. As part of the intake assessment, the provider of case management services shall identify individuals whose needs may be addressed through case management services.~~

~~B.~~ Providers of case management services shall document that the services below are performed consistent with the individual's assessment and ~~individualized services plan~~ ISP.

1. Enhancing community integration through increased opportunities for community access and involvement and creating opportunities to enhance community living skills to promote community adjustment including, to the maximum extent possible, the use of local community resources available to the general public;

2. Making collateral contacts with the individual's significant others with properly authorized releases to promote implementation of the individual's individualized services plan and his community adjustment;

3. Assessing needs and planning services to include developing a case management individualized services plan;

4. Linking the individual to those community supports that are most likely to promote the personal [~~habilitative/rehabilitative~~ habilitative or rehabilitative] and life goals of the individual as developed in the ~~individualized service plan (ISP)~~ ISP;

5. Assisting the individual directly to locate, develop, or obtain needed services, resources, and appropriate public benefits;

6. Assuring the coordination of services and service planning within a provider agency, with other providers [,] and with other human service agencies and systems, such as local health and social services departments;

7. Monitoring service delivery through contacts with individuals receiving services [, and] service providers and periodic site and home visits to assess the quality of care and satisfaction of the individual;

8. Providing follow up instruction, education [,] and counseling to guide the individual and develop a supportive relationship that promotes the ~~individualized services plan~~ ISP;

9. Advocating for individuals in response to their changing needs, based on changes in the individualized services plan;

~~10. Developing a crisis plan for an individual that includes the individual's references regarding treatment in an emergency situation;~~

~~11.~~ 10. Planning for transitions in [the] individual's [~~lives~~ life] ; ~~and~~

~~12.~~ 11. Knowing and monitoring the individual's health status, any medical conditions, and his medications and potential side effects, and assisting the individual in accessing primary care and other medical services, as needed~~.~~; and

12. Understanding the capabilities of services to meet the individual's [~~indentified~~ identified] needs and preferences and to serve the individual without placing the individual, other participants, or staff at risk of serious harm.

12VAC35-105-1250. Qualifications of case management employees or contractors.

A. Employees or contractors providing case management services shall have knowledge of:

1. Services and systems available in the community including primary health care, support services, eligibility criteria and intake processes and generic community resources;

2. The nature of serious mental illness, mental retardation ~~and/or~~ (intellectual disability), substance abuse [(substance use disorders)], or co-occurring disorders depending on the ~~population~~ [~~individual's~~ individuals] served, including clinical and developmental issues;

3. Different types of assessments, including functional assessment, and their uses in service planning;

4. Treatment modalities and intervention techniques, such as behavior management, independent living skills training, supportive counseling, family education, crisis intervention, discharge planning [,] and service coordination;

5. Types of mental health, [~~mental retardation (intellectual disability)~~ developmental,] and substance abuse programs available in the locality;

6. The service planning process and major components of a service plan;

7. The use of medications in the care or treatment of the population served; and

8. All applicable federal and state laws [~~, state~~ and] regulations and local ordinances.

B. Employees or contractors providing case management services shall have skills in:

1. Identifying and documenting an individual's need for resources, services, and other supports;

2. Using information from assessments, evaluations, observation, and interviews to develop service plans;

3. Identifying and documenting how resources, services [,] and natural supports such as family can be utilized to promote achievement of an individual's personal [~~habilitative/rehabilitative~~ habilitative or rehabilitative] and life goals; and

4. Coordinating the provision of services by diverse public and private providers.

C. Employees or contractors providing case management services shall have abilities to:

1. Work as team members, maintaining effective inter- and intra-agency working relationships;

2. Work independently performing position duties under general supervision; and

3. Engage [in] and sustain ongoing relationships with individuals receiving services.

12VAC35-105-1255. Case manager choice.

The provider shall [~~develop and~~] implement a [written] policy [~~as to~~ describing] how individuals are assigned case managers and how they can request a change of their assigned case manager.

12VAC35-105-1270. Physical environment requirements of community gero-psychiatric residential services.

A. Providers shall be responsible for ensuring safe mobility and unimpeded access to programs or services by installing and maintaining ramps, handrails, grab bars, elevators, protective surfaces [,] and other assistive devices or accommodations as determined by periodic review of the needs of the individuals being served. Entries, doors, halls [,] and program areas, including bedrooms, must have adequate room to accommodate [~~wheel chairs~~ wheelchairs] and allow for proper transfer of individuals. Single bedrooms shall have at least 100 square feet and multi-bed rooms shall have [at least] 80 square feet per individual.

B. Floors must have resilient, nonabrasive, and slip-resistant floor surfaces and floor coverings that promote mobility in areas used by individuals and promote maintenance of sanitary conditions.

C. Temperatures shall be maintained between 70°F and 80°F throughout resident areas.

D. Bathrooms, showers [,] and program areas must be accessible to individuals. There must be at least one bathing unit available by lift, door [,] or swivel-type tub.

E. Areas must be provided for quiet and for recreation.

F. Areas must be provided for charting, storing of administrative supplies, a utility room, employee hand washing, dirty linen, clean linen storage, clothes washing, and equipment storage.

12VAC35-105-1280. Monitoring.

Employees or contractors shall regularly monitor individuals in all areas of the residence to ensure safety.

12VAC35-105-1290. Service requirements for providers of gero-psychiatric residential services.

A. Providers shall provide mental health, nursing and rehabilitative services; medical and psychiatric services; and pharmaceutical services for each individual as specified in the ~~individualized services plan~~ ISP.

B. Providers shall provide crisis stabilization services.

C. Providers shall [~~develop and~~] implement written policies and procedures that support an active program of mental health and behavioral management [services] directed toward assisting each individual to achieve outcomes consistent with the highest level of self-care, independence [,] and quality of life. Programming may be on-site or at another location in the community.

D. Providers shall [~~develop and~~] implement written policies and procedures that respond to the nursing needs of each individual to achieve outcomes consistent with the highest level of self-care, independence [,] and quality of life. Providers shall be responsible for:

1. Providing each individual services to prevent clinically avoidable complications, including [~~but not limited to~~]: skin care, dexterity and mobility, continence, hydration [,] and nutrition;

2. Giving each individual proper daily personal attention and care, including skin, nail, hair [,] and oral hygiene, in addition to any specific care ordered by the attending physician;

3. Dressing each individual in clean clothing and encouraging each individual to wear day clothing when out of bed;

4. Providing each individual tub or shower baths as often as needed, but not less than twice weekly [,] or a sponge bath daily if the medical condition prohibits tub or shower baths~~.~~;

5. Providing each individual appropriate pain management; and

6. Ensuring that each individual has his own personal utensils, grooming items, adaptive devices [,] and other personal belongings including those with sentimental value.

E. Providers shall integrate [~~behavioral/mental health~~ behavioral and mental health] care and [~~medical/nursing~~ medical and nursing] care in the [~~individualized services plan~~ ISP].

F. Providers shall have available nourishment between scheduled meals.

12VAC35-105-1300. Staffing requirements for community gero-psychiatric residential services.

A. Community gero-psychiatric residential services shall be under the direction of a:

1. Program director with experience in gero-psychiatric services [~~.~~ ,]

2. Medical director [~~.~~ ; and]

3. Director of clinical services who is a registered nurse with experience in gero-psychiatric services.

B. Providers shall provide qualified nursing supervisors, nurses, and certified nurse aides on all shifts, seven days per week, in sufficient number to meet the assessed nursing care and behavioral management needs determined by the ~~individualized services plans~~ ISPs.

C. Providers shall provide qualified staff for behavioral, psychosocial rehabilitation, rehabilitative, mental health, or recreational programming to meet the needs determined by the ~~individualized services plan~~ ISP. These services shall be under the direction of a registered nurse, licensed psychologist, licensed clinical social worker, or licensed therapist.

12VAC35-105-1310. Interdisciplinary services planning team.

A. At a minimum, a registered nurse, a licensed psychologist, a licensed social worker, a therapist (recreational, occupational or physical therapist), a pharmacist, and a psychiatrist shall participate in the development and review of the ~~individualized services plan~~ ISP. Other employees or contractors as appropriate shall be included.

B. The interdisciplinary services planning team shall meet to develop the ~~individualized services plans~~ ISP and review it quarterly. Members of the team shall be available for consultation on an as needed basis.

C. The interdisciplinary services planning team shall review the medications prescribed at least quarterly and consult with the primary care physician as needed.

D. The interdisciplinary services planning team shall integrate medical care plans prescribed by the primary care physician into the ~~individualized services plan~~ ISP and consult with the primary care physician as needed.

12VAC35-105-1330. Medical director.

Providers of community gero-psychiatric ~~community~~ residential services shall employ or have a written agreement with one or more psychiatrists with training and experience in gero-psychiatric services to serve as medical director. The duties of the medical director shall include [~~, but are not limited to~~]:

1. Responsibility for [~~the~~] overall medical and psychiatric care;

2. Advising the program director and the director of clinical services on [~~medical/psychiatric~~ medical and psychiatric] issues, including the criteria for residents to be admitted, transferred [,] or discharged;

3. Advising on the development, execution [,] and coordination of policies and procedures that have a direct effect upon the quality of medical, nursing [,] and psychiatric care delivered to [~~residents~~ individuals]; and

4. Acting as liaison and consulting with the administrator and the primary care physician on matters regarding medical, nursing [,] and psychiatric care policies and procedures.

12VAC35-105-1340. Physician services and medical care.

A. Each individual in a community gero-psychiatric residential service shall be under the care of a primary care physician. Nurse practitioners and physician assistants licensed to practice in Virginia may provide care in accordance with their practice agreements. Prior to, or at the time of admission, each individual, his ~~legally~~ authorized representative, or the entity responsible for his care shall designate a primary care physician.

B. The primary care physician shall conduct a physical examination at the time of admission or within 72 hours of admission into a community gero-psychiatric residential service. The primary care physician shall develop, in coordination with the interdisciplinary services planning team, a medical care plan of treatment for an individual.

C. All physicians or other prescribers shall review all medication orders at least every 60 days or whenever there is a change in medication.

D. The provider shall have a signed agreement with a local general hospital describing back-up and emergency medical care plans.

Article 7
Intensive Community Treatment and Program of Assertive Community Treatment Services

12VAC35-105-1360. Admission and discharge criteria.

A. Individuals must meet the following admission criteria:

1. ~~Severe~~ Diagnosis of a severe and persistent mental illness, predominantly schizophrenia, other psychotic disorder, or bipolar disorder [,] that seriously impairs functioning in the community. Individuals with a sole diagnosis of substance addiction or abuse or mental retardation (intellectual disability) are not eligible for services.

2. ~~Impairments on a continuing or intermittent basis without intensive community support to include one or more of the following~~ Significant challenges to community integration without intensive community support including persistent or recurrent difficulty with one or more of the following:

a. ~~Inability to consistently perform~~ Performing practical daily living tasks ~~required for basic adult functioning in the community~~;

b. ~~Persistent or recurrent failure to perform daily living tasks except with significant support of assistance by family, friends or relatives~~ Maintaining employment at a self-sustaining level or consistently carrying out homemaker roles; or

~~c. Inability to be consistently employed at a self-sustaining level or inability to consistently carry out homemaker roles; or~~

~~d. Inability to maintain~~ c. Maintaining a safe living situation.

3. High service needs indicated due to one or more of the following ~~problems~~:

a. Residence in a state [~~mental health facility~~ hospital] or other psychiatric hospital but clinically assessed to be able to live in a more independent situation if intensive services were provided or anticipated to require extended hospitalization, if more intensive services are not available;

b. ~~High user of state mental health facility or other acute psychiatric hospital inpatient services within the past two years or a frequent user of psychiatric emergency services (more than four times per year)~~ Multiple admissions to or at least one recent long-term stay (30 days or more) in a state [~~mental health facility~~ hospital] or other acute psychiatric hospital inpatient setting within the past two years; or a recent history of more than four interventions by psychiatric emergency services per year;

c. ~~Intractable (i.e., persistent or very recurrent)~~ Persistent or very recurrent severe major symptoms (e.g., affective, psychotic, suicidal);

d. Co-occurring substance addiction or abuse of significant duration (e.g., greater than six months);

e. High risk or a recent history (within the past six months) of criminal justice involvement (e.g., arrest ~~and~~ or incarceration);

f. ~~Unable to meet~~ Ongoing difficulty meeting basic survival needs or residing in substandard housing, homeless, or at imminent risk of becoming homeless; or

g. ~~Unable~~ Inability to consistently participate in traditional office-based services.

B. Individuals receiving PACT ~~individuals~~ or ICT services should not be discharged for failure to comply with treatment plans or other expectations of the provider, except in certain circumstances as outlined. Individuals must meet at least one of the following criteria to be discharged:

1. ~~Moving~~ Change in the individual's residence to a location out of the service area;

2. Death of the individual;

3. Incarceration of the individual for a period to exceed a year or long term hospitalization ~~for~~ (more than one year); however, the provider is expected to prioritize these individuals for PACT or ICT services upon their anticipated return to the community if the individual wishes to return to services and the service level is appropriate to his needs;

4. Choice of the individual ~~(the~~ with the provider ~~is~~ responsible for revising the ~~individualized services plan~~ ISP to meet any concerns of the individual leading to the choice of ~~discharge)~~ discharge; or

5. ~~Demonstration by the individual of an ability to function~~ Significant sustained recovery by the individual in all major role areas with minimal team contact and support for at least two years as determined by both the individual and ICT or PACT team.

12VAC35-105-1370. Treatment team and staffing plan.

A. ~~ICT and PACT~~ Services are delivered by interdisciplinary teams.

1. ~~The~~ PACT and ICT ~~team~~ teams shall ~~have employees or contractors, 80% of whom meet the qualifications of QMHP, who are qualified to provide the services described in 12VAC35-105-1410, including at least five full-time equivalent clinical employees or contractors on an ICT team and at least 10 full-time equivalent clinical employees or contractors on a PACT team, a program assistant, and a full- or part-time psychiatrist. The team shall~~ include the following positions:

a. Team Leader - one full time ~~equivalent (FTE)~~ [~~QMHP~~ QMHP-Adult] with at least three years experience in the provision of mental health services to adults with serious mental illness. The team leader shall oversee all aspects of team operations and shall routinely provide direct services to individuals in the community.

b. Nurses - ~~one or more FTE registered nurse with one year of experience or licensed practical nurse with three years of experience in the provision of mental health services to adults with serious mental illness~~ PACT and ICT nurses shall be full-time employees or contractors with the following minimum qualifications: A registered nurse (RN) shall have one year of experience in the provision of mental health services to adults with serious mental illness. A licensed practical nurse (LPN) shall have three years of experience in the provision of mental health services to adults with serious mental illness. ICT teams shall have at least one qualified full-time nurse. PACT teams shall have at least three qualified full-time nurses at least one of whom shall be a qualified RN.

c. ~~Mental health professionals — two or more FTE QMHPs (half of whom shall hold a master's degree), including a vocational specialist and a substance abuse specialist~~ One full-time vocational specialist and one full-time substance abuse specialist. These staff members shall provide direct services to [~~consumers~~ individuals] in their area of specialty and provide leadership to other team members to also assist individuals with their self identified employment or substance abuse recovery goals.

d. Peer specialists - one or more ~~FTE~~ full-time [equivalent] QPPMH or [~~QMHP~~ QMHP-Adult] who is or has been a recipient of mental health services for severe and persistent mental illness. The peer specialist shall be a fully integrated team member who provides peer support directly to individuals and provides leadership to other team members in understanding and supporting individuals' recovery goals.

e. Program assistant - one full-time person with skills and abilities in medical records management~~, operating and coordinating~~ shall operate and coordinate the management information system, ~~maintaining~~ maintain accounts and budget records for individual and program expenditures, and ~~providing~~ provide receptionist activities.

f. Psychiatrist - one physician who is board certified in psychiatry or who is board eligible in psychiatry and is licensed to practice medicine [in Virginia]. An equivalent ratio to 20 minutes (.008 FTE) of psychiatric time for each individual served must be maintained. The psychiatrist shall be a fully integrated team member who attends team meetings and actively participates in developing and implementing each individual ISP.

2. ~~In addition, a PACT team includes at least three FTE nurses (at least one of whom is an RN and five or more~~

~~mental health professionals.~~ [~~QMHP~~ QMHP-Adult] and mental health professional standards:

a. At least 80% of the clinical employees or contractors, not including the program assistant or psychiatrist, shall meet [~~QMHP~~ QMHP-Adult] standards and shall be qualified to provide the services described in 12VAC35-105-1410.

b. Mental health professionals – At least half of the clinical employees or contractors, not including the team leader or nurses and including the peer specialist if that person holds such a degree, shall hold a master's degree in a human service field.

3. Staffing capacity:

a. An ICT team shall have at least five full-time equivalent clinical employees or contractors. A PACT team shall have at least 10 full-time equivalent clinical employees or contractors.

~~B.~~ b. ICT and PACT teams ~~must~~ shall include a minimum number of employees (counting contractors but not counting the psychiatrist and program assistant) to maintain an employee to individual ratio of at least 1:10.

c. ICT teams may serve no more than 80 individuals. PACT teams may serve no more than 120 individuals.

d. A transition plan ~~will~~ shall be required of PACT teams that will allow for "start-up" when newly forming teams are not in full compliance with the PACT model relative to staffing patterns and ~~client~~ [~~consumer~~ individuals receiving services] capacity.

~~C.~~ B. ICT and PACT teams shall meet daily Monday through Friday or at least four days per week to review and plan routine services and to ~~plan for~~ address or prevent emergency and crisis situations.

~~D.~~ C. ICT teams shall operate a minimum of 8 hours per day, 5 days per week and shall provide services on a case-by-case basis in the evenings and on weekends. PACT teams shall be available to individuals 24 hours per day and shall operate a minimum of 12 hours each weekday and 8 hours each weekend day and each holiday.

~~E.~~ D. The ICT [~~and~~ or] PACT team shall make crisis services directly available 24 hours a day but may arrange coverage through another crisis services provider if the team coordinates with the crisis services provider daily. The PACT team shall operate an after-hours on-call system and be available to individuals by telephone or in person.

12VAC35-105-1390. ICT and PACT service daily operation and progress notes.

A. ICT teams and PACT teams shall conduct daily organizational meetings Monday through Friday at a regularly scheduled time to review the status of all individuals and the outcome of the most recent employee or contractor contact, assign daily and weekly tasks to employees and contractors, revise treatment plans as needed, plan for emergency and crisis situations, and to add service contacts that are identified as needed.

B. A daily log that provides a roster of individuals served in the ICT or PACT services program and documentation of services provided and contacts made with them shall be maintained and utilized in the daily team meeting. There shall also be at least a weekly individual progress note documenting ~~progress or lack of progress toward goals and objectives as outlined in the Psychosocial Rehabilitation Services Plan~~ services provided in accordance with the ISP or attempts to engage the [~~consumer~~ individual] in services.

12VAC35-105-1400. ICT and PACT assessment.

The provider shall solicit the individual's own assessment of his needs, strengths, goals, preferences [,] and abilities to identify the need for recovery oriented treatment, rehabilitation [,] and support services and the status of his environmental supports within the individual's cultural context. ~~The~~ With the participation of the individual, the provider [~~will~~ shall] assess:

1. Psychiatric history, mental status and diagnosis, including the content of an advance directive;

2. Medical, dental [,] and other health needs;

3. Extent and effect of drug or alcohol use;

4. Education and employment [,] including current daily [~~structures~~ structured] use of time, school or work status, interests and preferences [,] ~~and the effect of psychiatric symptomatology on~~ and supports and barriers to educational and employment performance;

5. Social development and functioning [,] including childhood and family history, ~~culture and~~ religious beliefs, leisure interests, and social skills;

6. Housing and daily living skills, including the support needed to obtain and maintain decent, affordable housing integrated into the broader community; the current ability to meet basic needs such as personal hygiene, food preparation, housekeeping, shopping, money management [,] and the use of public transportation and other community based resources;

7. Family and social network [,] including the current scope and strength of [~~a~~ an] individual's network of family, peers, friends, and co-workers, and their understanding and expectations of the team's services;

8. Finances and benefits [,] including the management of income, the need for and eligibility for benefits, and the limitations and restrictions of those benefits; and

9. Legal and criminal justice involvement [,] including [~~the~~] guardianship, commitment, representative payee status, and [~~the~~] experience as either [a] victim or [an] accused person.

12VAC35-105-1410. Service requirements.

Providers shall document that the following services are provided consistent with the individual's assessment and ~~individualized services plan~~ ISP.

1. Ongoing assessment to ascertain the needs, strengths, and preferences of the individual;

2. Case management;

3. Nursing;

4. ~~Symptom assessment and management~~ Support for wellness self-management, including the development and implementation of individual recovery plans [~~:~~ ,] symptom assessment [~~:~~ ,] and recovery education;

5. Psychopharmacological treatment, administration [,] and monitoring;

6. Substance abuse assessment and treatment for individuals with a ~~dual~~ co-occurring diagnosis of mental illness and substance abuse;

7. Individual supportive therapy;

8. Skills training in activities of daily living, social skills, interpersonal relationships, and leisure time;

9. Supportive in-home services;

10. Work-related services to help find and maintain employment;

11. Support for resuming education;

12. Support, education, consultation, and skill-teaching to family members and significant others;

13. Collaboration with families and assistance to individuals with children;

14. Direct support to help individuals secure and maintain decent, affordable housing that is integrated into the broader community and to obtain legal and advocacy services, financial support, money-management services, medical and dental services, transportation, and natural supports in the community; and

15. Mobile crisis assessment, ~~intervention~~ interventions to prevent or resolve potential crises, and [~~facilitation into and out of~~ admission to and discharge from] psychiatric hospitals.

NOTICE: The forms used in administering the above regulation are not being published; however, the name of each form is listed below. The forms are available for public inspection by contacting the agency contact for this regulation, or at the office of the Registrar of Regulations, General Assembly Building, 2nd Floor, Richmond, Virginia.

FORMS (12VAC35-105)

Initial Provider Application For Licensing (rev.1/10).

Renewal Provider Application For Licensing (rev. 2/09).

Service Modification - Provider Request, DMH 966E 1140 (rev. 1/09).

DOCUMENTS INCORPORATED BY REFERENCE (12VAC35-105)

~~Diagnostic Criteria from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, American Psychiatric Association, Washington, D.C., 1994.~~

VA.R. Doc. No. R07-260; Filed October 17, 2011, 1:05 p.m.

◆ ◆

TITLE 18. PROFESSIONAL AND OCCUPATIONAL LICENSING

BOARD OF MEDICINE

Final Regulation

Title of Regulation: **18VAC85-101. Regulations Governing the Licensure of Radiologic Technologists and Radiologic Technologists-Limited (amending 18VAC85-101-10, 18VAC85-101-25, 18VAC85-101-30, 18VAC85-101-55, 18VAC85-101-100, 18VAC85-101-130, 18VAC85-101-145, 18VAC85-101-150, 18VAC85-101-152, 18VAC85-101-153, 18VAC85-101-161; adding 18VAC85-101-27, 18VAC85-101-28, 18VAC85-101-91, 18VAC85-101-92).**

Statutory Authority: §§ 54.1-2400 and 54.1-2956.8:1 of the Code of Virginia.

Effective Date: December 7, 2011.

Agency Contact: William L. Harp, M.D., Executive Director, Board of Medicine, 9960 Mayland Drive, Suite 300, Richmond, VA 23233, telephone (804) 367-4621, FAX (804) 527-4429, or email william.harp@dhp.virginia.gov.

Summary:

The amendments add the new profession of radiologist assistants (RAs) to 18VAC85-101, Regulations Governing the Licensure of Radiologic Technologists and Radiologists-Limited, and change the title of the regulation to Regulations Governing the Practice of Radiologic Technology. The amendments specify (i) the requirements for licensure of RAs, including the education and examination that will ensure minimum competency to practice; (ii) provisions for applicant and licensure fees; (iii) requirements for renewal and reinstatement of a license to include evidence of continuing competency to

practice; and (iv) provisions for scope of practice, including supervision by a doctor of medicine or osteopathic medicine specialized by training and practice in radiology. Current regulations, such as standards of conduct and renewal schedules, are amended to be applicable to RAs as well as radiologic technologists and radiologic technologists-limited.

Summary of Public Comments and Agency's Response: A summary of comments made by the public and the agency's response may be obtained from the promulgating agency or viewed at the office of the Registrar of Regulations.

[CHAPTER 101
REGULATIONS GOVERNING THE ~~LICENSURE~~ PRACTICE OF RADIOLOGIC ~~TECHNOLOGISTS AND RADIOLOGIC TECHNOLOGISTS-LIMITED~~ TECHNOLOGY]

Part I
General Provisions

18VAC85-101-10. Definitions.

In addition to definitions in § 54.1-2900 of the Code of Virginia, the following words and terms when used in this chapter shall have the following meanings, unless the context clearly indicates otherwise:

"ACRRT" means the American Chiropractic Registry of Radiologic Technologists.

"ARRT" means the American Registry of Radiologic Technologists.

"Bone densitometry" means a process for measuring bone mineral density by utilization of single x-ray absorptiometry (SXA), dual x-ray absorptiometry (DXA) or other technology that is substantially equivalent as determined by the board.

"Direct supervision" means that a licensed radiologic technologist, doctor of medicine, osteopathy, chiropractic or podiatry is present and is fully responsible for the activities performed by radiologic personnel, with the exception of radiologist assistants.

"Direction" means the delegation of radiologic functions to be performed upon a patient from a licensed doctor of medicine, osteopathy, chiropractic, or podiatry, to a licensed radiologic technologist or a radiologic technologist-limited for a specific purpose and confined to a specific anatomical area, that will be performed under the direction of and in continuing communication with the delegating practitioner.

"ISCD" means the International Society for Clinical Densitometry.

"Radiologist" means a doctor of medicine or osteopathic medicine [~~specializing in radiology who is certified by the American Board of Radiology, the American Osteopathic Board of Radiology, the British Royal College of Radiology, or the Canadian College of Physicians and Surgeons~~ specialized by training and practice in radiology].

["~~RT-R~~® R.T.(R)"] means a person who is currently certified by the ARRT as a radiologic technologist with certification in [~~radiology~~ radiography].

"Traineeship" means a period of activity during which an applicant for licensure as a radiologic technologist works under the direct supervision of a practitioner approved by the board while waiting for the results of the licensure examination or an applicant for licensure as a radiologic technologist-limited working under direct supervision and observation to fulfill the practice requirements in 18VAC85-101-60.

18VAC85-101-25. Fees.

A. Unless otherwise provided, fees listed in this section shall not be refundable.

B. Initial licensure fees.

1. The application fee for radiologic technologist or radiologist assistant licensure shall be $130.

2. The application fee for the radiologic technologist-limited licensure shall be $90.

3. All examination fees shall be determined by and made payable as designated by the board.

C. Licensure renewal and reinstatement for a radiologic technologist or a radiologist assistant.

1. The fee for active license renewal for a radiologic technologist shall be $135, and the fee for inactive license renewal shall be $70. If a radiologist assistant holds a current license as a radiologic technologist, the renewal fee shall be $50. If a radiologist assistant does not hold a current license as a radiologic technologist, the renewal fee shall be $150.

2. An additional fee of $50 to cover administrative costs for processing a late renewal application within one renewal cycle shall be imposed by the board.

3. The fee for reinstatement of a radiologic technologist or a radiologist assistant license that has lapsed for a period of two years or more shall be $180 and shall be submitted with an application for licensure reinstatement.

4. The fee for reinstatement of a license pursuant to § 54.1-2408.2 of the Code of Virginia shall be $2,000.

D. Licensure renewal and reinstatement for a radiologic technologist-limited.

1. The fee for active license renewal shall be $70, and the fee for inactive license renewal shall be $35.

2. An additional fee of $25 to cover administrative costs for processing a late renewal application within one renewal cycle shall be imposed by the board.

3. The fee for reinstatement of a license that has lapsed for a period of two years or more shall be $120 and shall be submitted with an application for licensure reinstatement.

4. The fee for reinstatement of a license pursuant to § 54.1-2408.2 of the Code of Virginia shall be $2,000.

E. Other fees.

1. The application fee for a traineeship as a radiologic technologist or a radiologic technologist-limited shall be $25.

2. The fee for a letter of good standing or verification to another state for licensure shall be $10; the fee for certification of scores to another jurisdiction shall be $25.

3. The fee for a returned check shall be $35.

4. The fee for a duplicate license shall be $5.00, and the fee for a duplicate wall certificate shall be $15.

Part II
Licensure Requirements - Radiologist Assistants

18VAC85-101-27. Educational requirements for radiologist assistants.

An applicant for licensure as a radiologist assistant shall be a graduate of an educational program that is currently recognized by the ARRT for the purpose of allowing an applicant to sit for the ARRT certification examination leading to the Registered Radiologist Assistant credential.

18VAC85-101-28. Licensure requirements.

A. An applicant for licensure as a radiologist assistant shall:

1. Meet the educational requirements specified in 18VAC85-101-27;

2. Submit the required application, fee, and credentials to the board;

3. Hold certification by the ARRT as an [~~RT-R®~~ R.T.(R)] or be licensed in Virginia as a radiologic technologist;

4. Submit evidence of passage of an examination for radiologist assistants resulting in national certification as an Registered Radiologist Assistant by the ARRT; and

5. Hold current certification in Advanced Cardiac Life Support (ACLS).

B. If an applicant has been licensed or certified in another jurisdiction as a radiologist assistant or a radiologic technologist, he shall provide information on the status of each license or certificate held.

C. An applicant who fails the ARRT examination for radiologist assistants shall follow the policies and procedures of the ARRT for successive attempts.

Part ~~II~~ III
Licensure Requirements - Radiologic Technologist

18VAC85-101-30. Educational requirements for radiologic technologists.

An applicant for licensure as a radiologic technologist shall be a graduate of an educational program acceptable to the ARRT for the purpose of sitting for the ARRT certification examination.

Part ~~III~~ IV
Licensure Requirements - Radiologic Technologist-Limited

18VAC85-101-55. Educational requirements for radiologic technologists-limited.

A. An applicant for licensure as a radiologic technologist-limited shall be trained by one of the following:

1. Successful completion of a program that is directed by a radiologic technologist with a bachelor's degree and current ARRT certification, has instructors who are licensed radiologic technologists or doctors of medicine or osteopathic medicine who are board certified in radiology, and has a minimum of the following coursework:

a. Image production/equipment operation - 25 clock hours;

b. Radiation protection - 15 clock hours; and

c. Radiographic procedures in the anatomical area of the radiologic technologist-limited's practice - 10 clock hours taught by a radiologic technologist with current ARRT certification or a licensed doctor of medicine, osteopathy, podiatry or chiropractic;

2. An ACRRT-approved program;

3. The ISCD certification course for bone densitometry; or

4. Any other program acceptable to the board.

B. A radiologic technologist-limited who has been trained through the ACRRT-approved program or the ISCD certification course and who also wishes to be authorized to perform x-rays in other anatomical areas shall meet the requirements of subdivision A 1 of this section.

Part V
Practice of Radiologist Assistants

18VAC85-101-91. General requirements.

A. A licensed radiologist assistant is authorized to:

1. Assess and evaluate the physiological and psychological responsiveness of patients undergoing radiologic procedures;

2. Perform patient assessment, and assist in patient management and patient education;

3. Evaluate image quality, make initial observations, and communicate observations to the supervising radiologist;

4. Administer contrast media or other medications prescribed by the supervising radiologist; and

5. Perform, or assist the supervising radiologist in performing, imaging procedures consistent with the guidelines adopted by the American College of Radiology, the American Society of Radiologic Technologists, and the American Registry of Radiologic Technologists.

B. A licensed radiologist assistant is not authorized to:

1. Provide official interpretation of imaging studies; or

2. Dispense or prescribe medications.

18VAC85-101-92. Supervision of radiologist assistants.

A radiologist assistant shall practice under the direct supervision of a radiologist. Direct supervision shall mean that the radiologist is present in the facility and immediately available to assist and direct the performance of a procedure by a radiologist assistant. The supervising radiologist may determine that direct supervision requires his physical presence for the performance of certain procedures, based on factors such as the complexity or invasiveness of the procedure and the experience and expertise of the radiologist assistant.

Part ~~IV~~ VI
Practice of Radiologic Technologists

18VAC85-101-100. General requirements.

A. All services rendered by a radiologic technologist shall be performed only upon direction of a licensed doctor of medicine, osteopathy, chiropractic, or podiatry.

B. Licensure as a radiologic technologist is not required for persons who are employed by a licensed hospital pursuant to § 54.1-2956.8:1 of the Code of Virginia.

Part ~~V~~ VII
Practice of Radiologic Technologist-Limited

18VAC85-101-130. General requirements.

A. A radiologic technologist-limited is permitted to perform radiologic functions within his capabilities and the anatomical limits of his training and examination. A radiologic technologist-limited is responsible for informing the board of the anatomical area or areas in which he is qualified by training and examination to practice.

B. A radiologic technologist-limited shall not instill contrast media during radiologic examinations or perform mammography, fluoroscopic procedures, computerized tomography, or vascular-interventional procedures. The radiologic technologist-limited is responsible to a licensed radiologic technologist, or doctor of medicine, osteopathy, chiropractic, or podiatry.

18VAC85-101-145. Registration for voluntary practice by out-of-state licensees.

Any radiologist assistant, radiologic technologist, or radiologic technologist-limited who does not hold a license to practice in Virginia and who seeks registration to practice under subdivision 27 of § 54.1-2901 of the Code of Virginia on a voluntary basis under the auspices of a publicly supported, all volunteer, nonprofit organization that sponsors the provision of health care to populations of underserved people shall:

1. File a complete application for registration on a form provided by the board at least five business days prior to engaging in such practice. An incomplete application will not be considered;

2. Provide a complete record of professional licensure in each state in which he has held a license and a copy of any current license;

3. Provide the name of the nonprofit organization, the dates and location of the voluntary provision of services;

4. Pay a registration fee of $10; and

5. Provide a notarized statement from a representative of the nonprofit organization attesting to its compliance with provisions of subdivision 27 of § 54.1-2901 of the Code of Virginia.

Part ~~VI~~ VIII
Renewal of Licensure

18VAC85-101-150. Biennial renewal of license.

A. A radiologist assistant, radiologic technologist, or radiologic technologist-limited who intends to continue practice shall renew his license biennially during his birth month in each odd-numbered year and pay to the board the prescribed renewal fee.

B. A license that has not been renewed by the first day of the month following the month in which renewal is required shall be expired.

C. An additional fee as prescribed in 18VAC85-101-25 shall be imposed by the board.

D. In order to renew an active license as a radiologic technologist, a licensee shall attest to having completed 24 hours of continuing education as acceptable to the ARRT within the last biennium.

E. In order to renew an active license as a radiologic technologist-limited, a licensee shall attest to having completed 12 hours of continuing education within the last biennium that corresponds to the anatomical areas in which

the limited licensee practices. Hours shall be acceptable to the ARRT, or by the ACRRT for limited licensees whose scope of practice is chiropractic, or by any other entity approved by the board for limited licensees whose scope of practice is podiatry or bone densitometry.

F. In order to renew an active license as a radiologist assistant, a licensee shall attest to having completed 50 hours of continuing education as acceptable to the ARRT within the last biennium. A minimum of 25 hours of continuing education shall be recognized by the ARRT as intended for radiologist assistants or radiologists and shall be specific to the radiologist assistant's area of practice. Continuing education hours earned for renewal of a radiologist assistant license shall satisfy the requirements for renewal of a radiologic technologist license.

G. Other provisions for continuing education shall be as follows:

1. A practitioner shall be exempt from the continuing education requirements for the first biennial renewal following the date of initial licensure in Virginia.

2. The practitioner shall retain in his records the Continued Competency Activity and Assessment Form available on the board's website with all supporting documentation for a period of four years following the renewal of an active license.

3. The board shall periodically conduct a random audit of its active licensees to determine compliance. The practitioners selected for the audit shall provide all supporting documentation within 30 days of receiving notification of the audit.

4. Failure to comply with these requirements may subject the licensee to disciplinary action by the board.

5. The board may grant an extension of the deadline for satisfying continuing competency requirements, for up to one year, for good cause shown upon a written request from the licensee prior to the renewal date.

6. The board may grant an exemption for all or part of the requirements for circumstances beyond the control of the licensee, such as temporary disability, mandatory military service, or officially declared disasters.

18VAC85-101-152. Inactive license.

A. A licensed radiologist assistant, radiologic technologist, or radiologic technologist-limited who holds a current, unrestricted license in Virginia may, upon a request on the renewal application and submission of the required fee, be issued an inactive license. The holder of an inactive license shall not be required to maintain continuing education hours and shall not be entitled to perform any act requiring a license to practice radiography in Virginia.

B. To reactivate an inactive license, a licensee shall:

1. Submit the required application;

2. Pay a fee equal to the difference between the current renewal fee for inactive licensure and the renewal fee for active licensure; and

3. Verify that he has completed continuing education hours equal to those required for the period in which he held an inactive license in Virginia, not to exceed one biennium.

C. The board reserves the right to deny a request for reactivation to any licensee who has been determined to have committed an act in violation of § 54.1-2915 of the Code of Virginia or any provisions of this chapter.

18VAC85-101-153. Restricted volunteer license.

A. A licensed radiologist assistant, radiologic technologist, or a radiologic technologist-limited who held an unrestricted license issued by the Virginia Board of Medicine or by a board in another state as a licensee in good standing at the time the license expired or became inactive may be issued a restricted volunteer license to practice without compensation in a clinic that is organized in whole or in part for the delivery of health care services without charge in accordance with § 54.1-106 of the Code of Virginia.

B. To be issued a restricted volunteer license, a ~~licensed radiologic technologist or a radiologic technologist-limited~~ licensee shall submit an application to the board that documents compliance with requirements of § 54.1-2928.1 of the Code of Virginia and the application fee prescribed in 18VAC85-101-25.

C. The licensee who intends to continue practicing with a restricted volunteer license shall renew biennially during his birth month, meet the continued competency requirements prescribed in subsection D of this section, and pay to the board the renewal fee prescribed in 18VAC85-101-25.

D. The holder of a restricted volunteer license shall not be required to attest to hours of continuing education for the first renewal of such a license. For each renewal thereafter, a licensed radiologic technologist shall attest to having completed 12 hours of Category A continuing education as acceptable to and documented by the ARRT within the last biennium. A radiologic technologist-limited shall attest to having completed six hours of Category A continuing education within the last biennium that corresponds to the anatomical areas in which the limited licensee practices. Hours shall be acceptable to and documented by the ARRT or by any other entity approved by the board for limited licensees whose scope of practice is podiatry or bone densitometry.

Part ~~VII~~ IX
Standards of Professional Conduct

18VAC85-101-161. Confidentiality.

A practitioner shall not willfully or negligently breach the confidentiality between a practitioner and a patient. A breach of confidentiality that is required or permitted by applicable law or beyond the control of the practitioner shall not be considered negligent or willful.

NOTICE: The following forms used in administering the regulation have been filed by the Board of Medicine. The forms are not being published; however, the name of each form is listed below and may hyperlink to the actual form. Online users of this issue of the Virginia Register of Regulations may access the form, if available, by clicking on the name of the form. The forms are also available for public inspection at the Department of Health Professions, Perimeter Center, 9960 Mayland Drive, Suite 300, Henrico, Virginia 23233-1463, or at the Office of the Registrar of Regulations, General Assembly Building, 2nd Floor, Richmond, Virginia 23219.

FORMS (18VAC85-101)

~~Instructions for Completing an Application for Licensure as a Radiologic Technologist By Examination/Endorsement (rev. 9/07).~~

Instructions for Completing an Application for Licensure as a Radiologic Technologist By Examination/Endorsement (rev. 11/10).

Instructions for Completing an Application for Licensure as a Radiologist Assistant (rev. 11/10).

~~Application for a License as a Radiologic Technologist (rev. 9/07).~~

Application for a License as a Radiologic Technologist (rev. 11/10).

Application for a License to Practice as a Radiologist Assistant (rev. 11/10).

~~Form A, Claims History Sheet (rev. 8/07).~~

[~~Form A, Claims History Sheet (rev. 11/10).~~

Form A, Radiologic Technologist, Claims History Sheet (rev. 11/10).]

Form A, Radiologist Assistant, Claims History (rev. 11/10).

~~Form B, Activity Questionnaire (rev. 8/07).~~

[~~Form B, Activity Questionnaire (rev. 11/10).~~

Form B, Radiologic Technologist, Activity Questionnaire (rev. 11/10).]

Form B, Radiologist Assistant, Activity Questionnaire (rev. 11/10).

~~Form C, Clearance from Other States (rev. 8/07).~~

[~~Form C, Clearance from Other States (rev. 11/10).~~

Form C, Radiologic Technologist, Clearance from Other States (rev. 11/10).]

Form C, Radiologist Assistant, Clearance from Other States (rev. 11/10).

~~Form E, Certification Request from ARRT (rev. 8/07).~~

[~~Form E, Certification Request from ARRT (rev. 11/10).~~

Form E, Radiologist Assistant, Certification Request from ARRT (rev. 11/10).

Form E, Radiologic Technologist, Certification Request from ARRT (rev. 11/10).]

~~Form F, Traineeship Application (rev. 8/07).~~

Form F, Traineeship Application (rev. 11/10).

~~Form L, Certificate of Radiologic Technology Education (rev. 8/07).~~

[~~Form L, Certificate of Radiologic Technology Education (rev. 11/10).~~

Form L, Radiologic Technologist, Certificate of Professional Education (rev. 11/10).]

Form L, Radiologist Assistant, Certificate of Professional Education (rev. 11/10).

~~Instructions for Completing an Application for Licensure as a Radiologic Technologist Limited (rev. 2/08).~~

~~Application for a License to Practice Radiologic Technology Limited (rev. 8/07).~~

~~Form T/A (1) and T/A (2), Radiologic Technologist Limited Training Application for Abdomen/Pelvis pursuant to Virginia Regulations 18VAC85-101-60 B (3) (rev. 8/07).~~

~~Form T/C (1) and T/C (2), Radiologic Technologist Limited Clinical Training Application (rev. 8/07).~~

~~Form T/E, Radiologic Technologist Limited Traineeship Application (rev. 8/07).~~

Instructions for Completing an Application for Licensure as a Radiologic Technologist-Limited (rev. 11/10).

Application for a License to Practice Radiologic Technology-Limited (rev. 11/10).

Form T/A (1) and T/A (2), Radiologic Technologist-Limited Training Application for Abdomen/Pelvis pursuant to Virginia Regulations 18VAC85-101-60 B (3) (rev. 11/10).

Form T/C (1) and T/C (2), Radiologic Technologist-Limited Clinical Training Application (rev. 11/10).

Form T/E, Radiologic Technologist-Limited Traineeship Application (rev. 11/10).

[Form A, Radiologic Technologist-Limited, Claims History Sheet (rev. 11/10).

Form B, Radiologic Technologist-Limited, Activity Questionnaire (rev. 11/10).

Form C, Radiologic Technologist-Limited, Clearance From Other States (rev. 11/10).]

Instructions for Completing Reinstatement of Radiologic Technology Licensure (rev. 8/07).

Application for Reinstatement of License to Practice Radiologic Technologist (rev. 10/07).

Instructions for Completing Reinstatement of Radiologic Technologist-Limited Licensure (rev. 8/07).

Application for Reinstatement of License to Practice Radiologic Technologist-Limited (eff. 10/07).

Application for Registration for Volunteer Practice (rev. 8/07).

Sponsor Certification for Volunteer Registration (rev. 8/08).

Continued Competency Activity and Assessment Form (eff. 7/08).

VA.R. Doc. No. R10-2130; Filed October 17, 2011, 11:20 a.m.

BOARD OF NURSING

Fast-Track Regulation

Title of Regulation: **18VAC90-20. Regulations Governing the Practice of Nursing (amending 18VAC90-20-182).**

Statutory Authority: § 54.1-2400 of the Code of Virginia.

Public Hearing Information: No public hearings are scheduled.

Public Comment Deadline: December 7, 2011.

Effective Date: December 22, 2011.

Agency Contact: Jay P. Douglas, R.N., Executive Director, Board of Nursing, 9960 Mayland Drive, Suite 300, Richmond, VA 23233-1463, telephone (804) 367-4515, FAX (804) 527-4455, or email jay.douglas@dhp.virginia.gov.

Basis: Section 54.1-2400 of the Code of Virginia provides the Board of Nursing the authority to promulgate regulations to administer the regulatory system.

The specific authority for the Board of Nursing to issue a single state license to an applicant who has lost a license in another Compact state is found in § 54.1-2408 of the Code of Virginia.

Purpose: If a nurse has had his license suspended or revoked by another state in the Nurse Licensure Compact (NLC) and subsequently that nurse moves to Virginia, he is in a catch-22 situation. Since he now resides in Virginia, he is ineligible by virtue of the Compact to apply for reinstatement of his nursing license in the former home state where the license was suspended or revoked. Yet, prior to July 1, 2010, § 54.1-2408 of the Code of Virginia prohibited the Board of Nursing from licensing an individual who has been suspended or revoked. Therefore, even if that individual is eligible for reinstatement, he is unable to obtain a license either in Virginia or in the original Compact state. In order to protect the health and safety of patients in Virginia, the board will consider whether the applicant has met all terms and conditions and is eligible for reinstatement in the state where he was suspended or revoked.

The amendment in 18VAC90-20-182 will ensure Virginia's compliance with the NLC policies and rules and provide a mechanism for the Board of Nursing to consider the application of an individual who now resides in Virginia and by virtue of the requirements of the NLC is ineligible to apply for licensure in the former home state where the license was suspended or revoked. The Nurse Licensure Compact Administrator Group has requested that all Compact states adopt regulations to conform to the NLC policy allowing for issuance of a license in this circumstance that would be valid for practice solely in the home state. States would be prohibited from issuing a license with a multistate privilege if the license had not been reinstated in the former home state.

Rationale for Using Fast-Track Process: The issue of licensure for an applicant who had a license that was surrendered, suspended, revoked, or denied in another Compact state but has met all terms and conditions is not controversial. When House Bill 662 was introduced into the 2010 Session of the General Assembly at the request of the Department of Health Professions, the inclusion of an amendment to allow such issuance was supported by all nursing groups, employers, and other interested parties. Therefore, the addition of subsection B in 18VAC90-20-182, permitted by the passage of enactment of Chapter 414 of the 2010 Acts of Assembly and the amendment to § 54.1-2408, should not be controversial.

Substance: Subsection B is added to 18VAC90-20-182 to provide that an individual who had a license that was surrendered, revoked, or suspended, or an application denied for cause in a prior state of primary residence, may be issued a single state license in a new primary state of residence until such time as the individual would be eligible for an unrestricted license by the prior state(s) of adverse action. Once eligible for licensure in the prior state(s), a multistate license may be issued.

Issues: The primary advantage to the public is the continued availability of nurses who have completed terms and conditions placed on their licenses in other states. The primary advantage to the agency is continued consistency with the Model Rules and Regulations of the Nurse Licensure Compact. There are no disadvantages.

Department of Planning and Budget's Economic Impact Analysis:

Summary of the Proposed Amendments to Regulation. Pursuant to amendments made to § 54.1-2408 in 2010, the proposed regulations allow the Board of Nursing to issue a single-state license to a nurse who has had her license suspended, revoked, or surrendered in another Nurse Licensure Compact state.

Result of Analysis. The benefits likely exceed the costs for all proposed changes.

Estimated Economic Impact. Under the current regulations, if a nurse has had his or her license suspended, revoked, or surrendered in another state in the Nurse Licensure Compact and subsequently moved to Virginia, he or she is ineligible by virtue of the Compact to apply for reinstatement of his nursing license in the former home state where the license was suspended, revoked, or surrendered.[1] Also, prior to July 1, 2010, § 54.1-2408 prohibited the Board of Nursing from licensing an individual who has been suspended, revoked, or surrendered in another Compact state. Therefore, even if that individual may have been eligible for reinstatement, he or she was unable to obtain a license either in Virginia or in the Compact state.

Amendments made to § 54.1-2408 in 2010 allow the Board of Nursing to issue a license to a nurse who has had her license suspended, revoked, or surrendered in another Compact state. The proposed regulations incorporate this statutory change into the regulations.

The main benefit of the proposed change is making it possible for the Board of Nursing to issue a single-state license to a nurse who has had her license suspended, revoked, or surrendered in another state in the Nurse Licensure Compact and subsequently moved to Virginia. While reinstatement of a license may require some small administrative costs, they are not expected to be significant. The number of nurses whose licenses may be issued under the proposed regulations is expected to be less than ten.

Businesses and Entities Affected. The regulations of the Board of Nursing apply to approximately 90,000 nurses. However, the number of nurses whose licenses may be reinstated under the proposed regulations is expected to be less than ten.

Localities Particularly Affected. The proposed regulations apply throughout the Commonwealth.

Projected Impact on Employment. The proposed regulations make it possible to reinstate a nurse who had his or her license suspended or revoked by another state in the Nurse Licensure Compact and subsequently moved to Virginia. Thus, an increase in the supply of nurses can be expected. The number of nurses whose licenses may be reinstated under the proposed regulations is expected to be less than ten.

Effects on the Use and Value of Private Property. The proposed regulations are not expected to have any effect on the use and value of private property.

Small Businesses: Costs and Other Effects. The proposed regulations are not expected to have any costs and other effects on small businesses.

Small Businesses: Alternative Method that Minimizes Adverse Impact. The proposed regulations are not expected to have any adverse effects on small businesses.

Real Estate Development Costs. The proposed regulations are not expected to have any effects of real estate development costs.

Legal Mandate. The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with § 2.2-4007.04 of the Administrative Process Act and Executive Order Number 14 (10). Section 2.2-4007.04 requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. Further, if the proposed regulation has adverse effect on small businesses, § 2.2-4007.04 requires that such economic impact analyses include (i) an identification and estimate of the number of small businesses subject to the regulation; (ii) the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the regulation, including the type of professional skills necessary for preparing required reports and other documents; (iii) a statement of the probable effect of the regulation on affected small businesses; and (iv) a description of any less intrusive or less costly alternative methods of achieving the purpose of the regulation. The analysis presented above represents DPB's best estimate of these economic impacts.

[1]Currently, there are 24 states in the Nurse Licensure Compact.

Agency's Response to Economic Impact Analysis: The Board of Nursing concurs with the analysis of the Department of Planning and Budget on proposed amended regulations for 18VAC90-20, Regulations Governing the Practice of Nursing.

Summary:

Based on Chapter 414 of the 2010 Acts of Assembly, the amendments allow the Board of Nursing to issue a single-state license to a nurse whose license was suspended, revoked, or surrendered in another Nurse Licensure Compact state.

18VAC90-20-182. Limitations of a multistate licensure privilege.

A. The board shall include in all disciplinary orders that limit practice or require monitoring the requirement that the licensee subject to the order shall agree to limit practice to Virginia during the period in which the order is in effect. A nurse may be allowed to practice in other party states while an order is in effect with prior written authorization from both the board and boards of other party states.

B. An individual who had a license that was surrendered, revoked, or suspended, or an application denied for cause in a prior state of primary residence, may be issued a single state license in a new primary state of residence until such time as the individual would be eligible for an unrestricted license by the prior state(s) of adverse action. Once eligible for licensure in the prior state(s), a multistate license may be issued.

VA.R. Doc. No. R12-2538; Filed October 17, 2011, 11:27 a.m.

Fast-Track Regulation

Title of Regulation: **18VAC90-20. Regulations Governing the Practice of Nursing (amending 18VAC90-20-210).**

Statutory Authority: § 54.1-2400 of the Code of Virginia.

Public Hearing Information: No public hearings are scheduled.

Public Comment Deadline: December 7, 2011.

Effective Date: December 22, 2011.

Agency Contact: Jay P. Douglas, R.N., Executive Director, Board of Nursing, 9960 Mayland Drive, Suite 300, Richmond, VA 23233-1463, telephone (804) 367-4515, FAX (804) 527-4455, or email jay.douglas@dhp.virginia.gov.

Basis: Section 54.1-2400 of the Code of Virginia provides the Board of Nursing the authority to promulgate regulations to administer the regulatory system.

Purpose: The purpose of the regulatory action is to eliminate the requirement for applicants from other countries to be duly licensed in another country to qualify for licensure in Virginia, as it now places many applicants in a catch-22 position. Once they have applied for the visa-screen and declared their intent to immigrate to the U. S., they are ineligible for licensure in their home country. The dilemma has been exacerbated by changes in immigration laws in recent years.

Applicants from foreign countries must have a Commission on Graduate of Foreign Nursing Schools (CGFNS) credentials review and the test of English proficiency. Those requirements, coupled with a requirement for passage of the National Council Licensing Examination (NCLEX), the national licensing examination that all nurses (RN or PN) must take, should assure that foreign-trained nurses have the basic nursing knowledge, clinical ability, and communication skills to practice with safety. Since NCLEX is more generally available in foreign countries than in the past, many nurses are able to come to the United States fully qualified for licensure. NCLEX is currently administered in Australia, Canada, England, Germany, Hong Kong, India, Japan, Mexico, Philippines, Puerto Rico, and Taiwan. Many applicants from those countries have already completed all requirements for licensure in Virginia and some are U. S. citizens. Because they are unable to obtain a license in the foreign country, they are unable to be licensed in Virginia.

Rationale for Using Fast Track Process: The current regulatory requirement is burdensome and unnecessary for public safety. It creates a barrier to licensure that prevents qualified nurses from other countries from coming to Virginia. Therefore, the board would like to eliminate the barrier as soon as possible and is supportive of a fast-track action. The board does not expect the proposal to be controversial.

Substance: 18VAC90-20-210 is amended to eliminate the requirement that a registered nurse or practical nurse applicant from a foreign country be duly licensed under the laws of that country in order to qualify for licensure in Virginia.

Issues: The primary advantage to the public is the availability of nurses who have completed all educational and examination requirements for licensure but who are currently unable to be licensed in Virginia. There are no disadvantages to the public. There are no advantages or disadvantages to the agency.

Department of Planning and Budget's Economic Impact Analysis:

Summary of the Proposed Amendments to Regulation. The Board of Nursing proposes to eliminate prior licensure requirement for applicants educated in foreign countries.

Result of Analysis. The benefits likely exceed the costs for all proposed changes.

Estimated Economic Impact. Current regulations require that applicants educated in foreign countries hold a nursing license in that country to be eligible for licensure in Virginia. This requirement creates two types of problems. First, declaration of intent to immigrate to the United States makes applicants ineligible for licensure in some of the foreign countries. Second, some of the United States citizens obtain their nursing education in foreign countries for reasons such as having familial ties there or taking advantage of lower cost of nursing education. Because applicants in these circumstances are unable to obtain a license in the foreign country, they are unable to be licensed in Virginia under current regulations. The proposed regulations will eliminate prior licensure requirement for applicants educated in foreign countries.

There appears to be sufficient safeguards in place to ensure that the knowledge, ability, and skills necessary to practice safe nursing in Virginia are not compromised due to the proposed change. Credentials of applicants from foreign countries will continue to be reviewed by the Commission on Graduate of Foreign Nursing Schools. Also, foreign educated nurses must pass the National Council Licensing Examination, the national licensing examination that all registered and practical nurses must take. According to Department of Health Professions, review of credentials and the passage of the national licensing examination should assure that foreign trained nurses have the basic nursing knowledge, clinical ability, and communication skills to practice with safety.

The proposed regulations will mainly benefit individuals who received their nursing education in a different country, who do not have a license in that country and who wish to be licensed in Virginia. It is probable that some of these individuals may be currently working in professions other than nursing and may not be fully utilizing their skills.

In addition, nursing employers in Virginia are expected to benefit from this change as the proposed change has the potential to increase the number of nurses available for employment. However, there is no reliable estimate for the potential increase in the number of nurses available for employment due to this proposed change. Given the current nursing shortage in Virginia, the potential employees are expected to benefit from this change.

Businesses and Entities Affected. The proposed regulations will affect nursing applicants educated in foreign countries who do not hold a license in those countries. There is no reliable estimate for the number of such individuals. However, there are approximately 98,000 nurses licensed in Virginia.

Localities Particularly Affected. The proposed regulations apply throughout the Commonwealth.

Projected Impact on Employment. The proposed regulations are expected to increase the supply of nurses which in turn should have a positive impact on employment given the current nursing shortage in Virginia.

Effects on the Use and Value of Private Property. The proposed regulations are not anticipated to have a significant effect on the use and value of private property.

Small Businesses: Costs and Other Effects. The proposed regulations are not anticipated to have significant costs and other effects on small businesses.

Small Businesses: Alternative Method that Minimizes Adverse Impact. The proposed regulations are not anticipated to have an adverse effect on small businesses.

Real Estate Development Costs. The proposed regulations are not anticipated to have an effect on real estate development costs.

Legal Mandate. The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with § 2.2-4007.04 of the Administrative Process Act and Executive Order Number 14 (10). Section 2.2-4007.04 requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. Further, if the proposed regulation has adverse effect on small businesses, § 2.2-4007.04 requires that such economic impact analyses include (i) an identification and estimate of the number of small businesses subject to the regulation; (ii) the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the regulation, including the type of professional skills necessary for preparing required reports and other documents; (iii) a statement of the probable effect of the regulation on affected small businesses; and (iv) a description of any less intrusive or less costly alternative methods of achieving the purpose of the regulation. The analysis presented above represents DPBs best estimate of these economic impacts.

Agency's Response to Economic Impact Analysis: The Board of Nursing concurs with the analysis of the Department of Planning and Budget on proposed amended regulations for 18VAC90-20, Regulations Governing the Practice of Nursing.

Summary:

The amendments eliminate the requirement that a registered nurse or practical nurse applicant from a foreign country be duly licensed under the laws of that country in order to qualify for licensure in Virginia.

18VAC90-20-210. Licensure of applicants from other countries.

A. With the exception of applicants from Canada who are eligible to be licensed by endorsement, applicants whose basic nursing education was received in~~, and who are duly licensed under the laws of,~~ another country~~,~~ shall be scheduled to take the licensing examination provided they meet the statutory qualifications for licensure. Verification of qualification shall be based on documents submitted as required in subsection B or C of this section.

B. Such applicants for registered nurse licensure shall:

1. Submit evidence from the CGFNS that the secondary education~~,~~ and nursing education~~, and license~~ are comparable to those required for registered nurses in the Commonwealth;

2. Submit evidence of passage of an English language proficiency examination approved by the CGFNS, unless the applicant meets the CGFNS criteria for an exemption from the requirement; and

3. Submit the required application and fee for licensure by examination.

C. Such applicants for practical nurse licensure shall:

1. Submit evidence from the CGFNS that the secondary education~~,~~ and nursing education~~, and license~~ are comparable to those required for practical nurses in the Commonwealth;

2. Submit evidence of passage of an English language proficiency examination approved by the CGFNS, unless the applicant meets the CGFNS criteria for an exemption from the requirement; and

3. Submit the required application and fee for licensure by examination.

D. An applicant for licensure as a registered nurse who has met the requirements of subsections A and B of this section may practice for a period not to exceed 90 days from the date of approval of an application submitted to the board when he is working as a nonsupervisory staff nurse in a licensed nursing home or certified nursing facility.

1. Applicants who practice nursing as provided in this subsection shall use the designation "foreign nurse graduate" on nametags or when signing official records.

2. During the 90-day period, the applicant shall take and pass the licensing examination in order to remain eligible to practice nursing in Virginia.

3. Any person practicing nursing under this exemption who fails to pass the licensure examination within the 90-day period may not thereafter practice nursing until he passes the licensing examination.

E. In addition to CGFNS, the board may accept credentials from other recognized agencies that review credentials of foreign-educated nurses if such agencies have been approved by the board.

VA.R. Doc. No. R12-2658; Filed October 17, 2011, 8:41 a.m.

BOARD OF PHARMACY

Fast-Track Regulation

Title of Regulation: **18VAC110-20. Regulations Governing the Practice of Pharmacy (amending 18VAC110-20-710).**

Statutory Authority: § 54.1-2400 of the Code of Virginia.

Public Hearing Information: No public hearings are scheduled.

Public Comment Deadline: December 7, 2011.

Effective Date: December 22, 2011.

Agency Contact: Caroline Juran, RPh, Executive Director, Board of Pharmacy, 9960 Mayland Drive, Suite 300, Richmond, VA 23233-1463, telephone (804) 367-4416, FAX (804) 527-4472, or email caroline.juran@dhp.virginia.gov.

Basis: Section 54.1-2400 established the general powers and duties of health regulatory boards, including the Board of Pharmacy's responsibility to promulgate regulations and establish renewal schedules.

The specific authority to control prescription drugs in the Commonwealth is found in Chapters 33 (§ 54.1-3300 et seq.) and 34 (§ 54.1-3400 et seq.) of Title 54.1 of the Code of Virginia.

Purpose: The elimination of a requirement for a security system for certain emergency medical services (EMS) agencies will make it less burdensome for a few small agencies to carry fluids that may be essential for the stabilization of a patient being transporting to the hospital. Any reduction in regulation that makes maintenance of an EMS agency less costly is beneficial and contributes to the health and safety of the people in its community.

Rationale for Using Fast Track Process: The amendments are proposed to eliminate an unnecessary security requirement for EMS agencies. The change is not expected to be controversial.

Substance: The substance of the amended regulation is to eliminate the requirement for a security system for EMS agencies that only stock IV fluids without added drugs.

Issues: The primary advantage to the public is the elimination of an expense for EMS agencies, particularly those who provide limited but essential services in many communities. There are no disadvantages. There are no advantages or disadvantages to the agency or the Commonwealth.

Department of Planning and Budget's Economic Impact Analysis:

Summary of the Proposed Amendments to Regulation. The Board of Pharmacy proposes to no longer require a security system for Emergency Medical Services agencies that only stock intravenous fluids with no drug additives.

Result of Analysis. The benefits likely exceed the costs for all proposed changes.

Estimated Economic Impact. The Board of Pharmacy proposes to eliminate the requirement for a security system for Emergency Medical Services (EMS) agencies that only stock intravenous fluids without added drugs. The security system is required to deter pilferage or diversion of drugs.

According to Department of Health Professions (DHP), it is unnecessarily burdensome for EMS agencies that only stock intravenous fluids without added drugs to have an alarm system. DHP estimates that less than 10 EMS agencies would stock only intravenous fluids. While this change has the potential to reduce compliance costs of certain EMS agencies, DHP does not know which agencies may be affected and does not have an estimate for the size of expected savings. Also, EMS agencies may have other incentives to obtain or maintain a security system making it difficult to assess the likely impact.

Businesses and Entities Affected. The proposed changes are expected to affect less than 10 EMS agencies.

Localities Particularly Affected. The proposed regulations apply throughout the Commonwealth.

Projected Impact on Employment. The proposed changes do not seem to be significant enough to have a notable effect on employment.

Effects on the Use and Value of Private Property. The proposed changes do not seem to be significant enough to have a notable effect on the use and value of private property.

Small Businesses: Costs and Other Effects. The proposed regulations do not impose costs on small businesses. Other effects on small businesses are the same as discussed above.

Small Businesses: Alternative Method that Minimizes Adverse Impact. There is no adverse impact expected on small businesses.

Real Estate Development Costs. The proposed regulations are not expected to create any real estate development costs.

Legal Mandate. The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with § 2.2-4007.04 of the Administrative Process Act and Executive Order Number 14 (10). Section 2.2-4007.04 requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. Further, if the proposed regulation has adverse effect on small businesses, § 2.2-4007.04 requires that such economic impact analyses include (i) an identification and estimate of the number of small businesses subject to the regulation; (ii) the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the regulation, including the type of professional skills necessary for preparing required reports and other documents; (iii) a statement of the probable effect of the regulation on affected small businesses; and (iv) a description of any less intrusive or less costly alternative methods of achieving the purpose of the regulation. The analysis presented above represents DPBs best estimate of these economic impacts.

Agency's Response to Economic Impact Analysis: The Board of Pharmacy concurs with the economic impact analysis of the Department of Planning and Budget on fast-track regulations to eliminate the security requirement for certain EMS agencies.

Summary:

The amendment eliminates the requirement for an alarm system for emergency medical services agencies that only stock intravenous fluids with no drug additives.

18VAC110-20-710. Requirements for storage and security for controlled substances registrants.

A. Drugs shall be stored under conditions which meet USP-NF specifications or manufacturers' suggested storage for each drug.

B. Any drug which has exceeded the expiration date shall not be administered; it shall be separated from the stock used for administration and maintained in a separate, locked area until properly disposed.

C. If a controlled substances registrant wishes to dispose of unwanted or expired Schedule II through VI drugs, he shall transfer the drugs to another person or entity authorized to possess and to provide for proper disposal of such drugs.

D. Drugs shall be maintained in a lockable cabinet, cart, device or other area which shall be locked at all times when not in use. The keys or access code shall be restricted to the supervising practitioner and persons designated access in accordance with 18VAC110-20-700 C.

E. In a facility not staffed 24 hours a day, the drugs shall be stored in a fixed and secured room, cabinet or area which has a security device for the detection of breaking which meets the following conditions:

1. The device shall be a sound, microwave, photoelectric, ultrasonic, or any other generally accepted and suitable device.

2. The installation and device shall be based on accepted alarm industry standards.

3. The device shall be maintained in operating order, have an auxiliary source of power, be monitored in accordance with accepted industry standards, be maintained in operating order; and shall be capable of sending an alarm signal to the monitoring entity if breached and the communication line is not operational.

4. The device shall fully protect all areas where prescription drugs are stored and shall be capable of detecting breaking by any means when activated.

5. Access to the alarm system shall be restricted to only designated and necessary persons, and the system shall be activated whenever the drug storage areas are closed for business.

6. An alarm system is not required for researchers, animal control officers, humane societies, ~~or~~ alternate delivery sites as provided in 18VAC110-20-275, or emergency medical services agencies stocking only intravenous fluids with no added drug.

VA.R. Doc. No. R12-2432; Filed October 17, 2011, 11:29 a.m.

BOARD OF VETERINARY MEDICINE

Fast-Track Regulation

Title of Regulation: **18VAC150-20. Regulations Governing the Practice of Veterinary Medicine (amending 18VAC150-20-190).**

Statutory Authority: § 54.1-2400 of the Code of Virginia.

Public Hearing Information: No public hearings are scheduled.

Public Comment Deadline: December 7, 2011.

Effective Date: December 22, 2011.

Agency Contact: Leslie L. Knachel, Executive Director, Board of Veterinary Medicine, 9960 Mayland Drive, Suite 300, Richmond, VA 23233, telephone (804) 367-4468, FAX (804) 527-4471, or email leslie.knachel@dhp.virginia.gov.

Basis: Section 54.1-2400 of the Code of Virginia establishes the responsibility of the Board of Veterinary Medicine to promulgate regulations and administer a licensure and renewal program.

Chapter 38 (§ 54.1-3800 et seq.) of Title 54.1 of the Code of Virginia grants the board the following specific powers and duties:

1. Establish essential requirements and standards for approval of veterinary programs.

2. Establish and monitor programs for the practical training of qualified students of veterinary medicine or veterinary technology in college or university programs of veterinary medicine or veterinary technology.

3. Regulate, inspect and register all establishments and premises where veterinary medicine is practiced.

Purpose: The purpose of the amended regulation is to update requirements for drug destruction consistent with current U.S. Drug Enforcement Administration (DEA) policies and rules. Proper destruction of drugs is essential to protect the health and safety of citizens who may be affected by improper flushing, incineration, or disposal in a landfill. Use of expired drugs that may be ineffective could affect the health and welfare of the animals that are patients of veterinarians.

Rationale for Using Fast-Track Process: This regulation is appropriate for the fast-track process because the agency does not have the option of continuing the current regulation, which calls for following instructions in a DEA package that no longer exists. The amendment states the guidance of the DEA for drug destruction and is identical to the regulation for drug destruction by other entities that stock drugs.

Substance: The amendments delete the requirement that Schedule II through V drugs be destroyed by following the instructions contained in the drug destruction packet available from the board office, which provides the latest U.S. Drug Enforcement Administration approved drug destruction guidelines. The amendments specify that the drugs can be destroyed by: (i) transferring the drugs to another entity authorized to possess or provide for proper disposal of such drugs; or (ii) destroying the drugs by burning in an incinerator that is in compliance with applicable local, state, and federal laws and regulations. Regulations further provide that if Schedule II through V drugs are to be destroyed, a DEA drug destruction form shall be fully completed and used as the record of all drugs to be destroyed. A copy of the destruction form shall be retained at the veterinarian practice site with other inventory records.

Issues: The primary advantage to the public would be the timely and effective destruction of stocks of unused, expired, or adulterated prescription drugs that could find their way into illegal distribution or abuse. For those reasons, the DEA has a drug destruction form that should be completed by any entity that has the legal authority to maintain a stock of controlled substances. There are no disadvantages to the public, which is better protected by the proper destruction of prescription drugs. There are no advantages or disadvantages to the agency.

Department of Planning and Budget's Economic Impact Analysis:

Summary of the Proposed Amendments to Regulation. The Board of Veterinary Medicine proposes to specify the drug destruction procedures in the regulations instead of requiring compliance with the drug destruction instructions contained in the packet available from the board office which provides the latest U.S. Drug Enforcement Administration approved drug destruction guidelines.

Result of Analysis. The benefits likely exceed the costs for all proposed changes.

Estimated Economic Impact. Current regulations require destruction of schedule II, III, IV, and V drugs according to the drug destruction instructions contained in the packet available from the board office which provides the latest U.S. Drug Enforcement Administration (DEA) approved drug destruction guidelines. However, DEA no longer has a drug destruction packet. Thus, the proposed regulations spell out the drug destruction procedures in the regulations.

The proposed procedures are the same as the guidelines established by DEA which include transferring drugs to an authorized reverse distributor, destroying by incineration that meets local state, and federal requirements, and completing a drug destruction form. Since the proposed requirements are the same as current requirements followed in practice, no significant economic effect is expected other than improving the clarity of the regulations.

Businesses and Entities Affected. The proposed regulations apply to 709 full service veterinary facilities and 240 restricted service veterinary facilities.

Localities Particularly Affected. The proposed regulations apply throughout the Commonwealth.

Projected Impact on Employment. No impact on employment is expected.

Effects on the Use and Value of Private Property. No impact on the use and value of private property is expected.

Small Businesses: Costs and Other Effects. Although most of the 709 full service veterinary facilities and 240 restricted service veterinary facilities are believed to be small businesses, proposed regulations are not expected to have any significant costs or other effects on small businesses.

Small Businesses: Alternative Method that Minimizes Adverse Impact. No adverse impact on small businesses is expected.

Real Estate Development Costs. No effect on real estate development costs is expected.

Legal Mandate. The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with § 2.2-4007.04 of the Administrative Process Act and Executive Order Number 14 (10). Section 2.2-4007.04 requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. Further, if the proposed regulation has adverse effect on small businesses, § 2.2-4007.04 requires that such economic impact analyses include (i) an identification and estimate of the number of small businesses subject to the regulation; (ii) the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the regulation, including the type of professional skills necessary for preparing required reports and other documents; (iii) a statement of the probable effect of the regulation on affected small businesses; and (iv) a description of any less intrusive or less costly alternative methods of achieving the purpose of the regulation. The analysis presented above represents DPB's best estimate of these economic impacts.

Agency's Response to Economic Impact Analysis: The Board of Veterinary Medicine concurs with the analysis of the Department of Planning and Budget for the proposed fast-track action on drug destruction in 18VAC150-20, Regulations Governing the Practice of Veterinary Medicine.

Summary:

The amendments set out the drug destruction procedures that veterinarians must follow in the regulations instead of requiring compliance with the drug destruction instructions contained in the packet available from the board office, which provides the latest U.S. Drug Enforcement Administration approved drug destruction guidelines.

18VAC150-20-190. Requirements for drug storage, dispensing, destruction, and records for all establishments, full service and restricted.

A. All drugs shall be maintained, administered, dispensed, prescribed and destroyed in compliance with state and federal laws, which include the Drug Control Act (§ 54.1-3400 et seq. of the Code of Virginia), applicable parts of the federal Food, Drug, and Cosmetic Control Act (21 USC § 301 et seq.), the Prescription Drug Marketing Act (21 USC § 301 et seq.), and the Controlled Substances Act (21 USC § 801 et seq.), as well as applicable portions of Title 21 of the Code of Federal Regulations.

B. All repackaged tablets and capsules dispensed for companion animals shall be in approved safety closure containers, except safety caps shall not be required when any person who requests that the medication not have a safety cap, or in such cases in which the medication is of such form or size that it cannot be reasonably dispensed in such containers (e.g., topical medications, ophthalmic, or otic). A client request for nonsafety packaging shall be documented in the patient record.

C. All drugs dispensed for companion animals shall be labeled with the following:

1. Name and address of the facility;

2. Name of client;

3. Animal identification;

4. Date dispensed;

5. Directions for use;

6. Name, strength (if more than one dosage form exists), and quantity of the drug; and

7. Name of the prescribing veterinarian.

D. All drugs shall be maintained in a secured manner with precaution taken to prevent diversion.

1. All Schedule II through V drugs shall be maintained under lock at all times, with access to the veterinarian or veterinary technician only, but not to any unlicensed personnel.

2. Whenever a veterinarian discovers a theft or any unusual loss of Schedule II, III, IV, or V drugs, he shall immediately report such theft or loss to the Board of Veterinary Medicine and to the U.S. Drug Enforcement Administration.

E. Schedule II, III, IV and V drugs shall be destroyed by ~~following the instructions contained in the drug destruction packet available from the board office which provides the latest U.S. Drug Enforcement Administration approved drug destruction guidelines~~ (i) transferring the drugs to another entity authorized to possess or provide for proper disposal of such drugs or (ii) destroying the drugs by burning in an incinerator that is in compliance with applicable local, state, and federal laws and regulations. If Schedule II through V drugs are to be destroyed, a DEA drug destruction form shall be fully completed and used as the record of all drugs to be destroyed. A copy of the destruction form shall be retained at the veterinarian practice site with other inventory records.

F. The drug storage area shall have appropriate provision for temperature control for all drugs and biologics, including a refrigerator with the interior thermometer maintained between 36°F and 46°F. Drugs stored at room temperature shall be maintained between 59°F and 86°F. The stock of drugs shall be reviewed frequently and removed from the working stock of drugs at the expiration date.

G. A distribution record shall be maintained in addition to the patient's record, in chronological order, for the administration and dispensing of all Schedule II-V drugs.

This record is to be maintained for a period of two years from the date of transaction. This record shall include the following:

1. Date of transaction;

2. Drug name, strength, and the amount dispensed, administered and wasted;

3. Client and animal identification; and

4. Identification of the veterinarian authorizing the administration or dispensing of the drug.

H. Original invoices for all Schedule II, III, IV and V drugs received shall be maintained in chronological order on the premises where the stock of drugs is held and actual date of receipt is noted. Invoices for Schedule II drugs shall be maintained separately from other records. All drug records shall be maintained for a period of two years from the date of transaction.

I. A complete and accurate inventory of all Schedule II, III, IV and V drugs shall be taken, dated, and signed on any date that is within two years of the previous biennial inventory. Drug strength must be specified. This inventory shall indicate if it was made at the opening or closing of business and shall be maintained on the premises where the drugs are held for two years from the date of taking the inventory.

J. Veterinary establishments in which bulk reconstitution of injectable, bulk compounding or the prepackaging of drugs is performed shall maintain adequate control records for a period of one year or until the expiration, whichever is greater. The records shall show the name of the drug(s) used; strength, if any; date repackaged; quantity prepared; initials of the veterinarian verifying the process; the assigned lot or control number; the manufacturer's or distributor's name and lot or control number; and an expiration date.

NOTICE: The following forms used in administering the regulation were filed by the agency. The forms are not being published; however, online users of this issue of the Virginia Register of Regulations may click on the name of the new or amended form to access it. The forms are also available from the agency contact or may be viewed at the Office of the Registrar of Regulations, General Assembly Building, 2nd Floor, Richmond, Virginia 23219.

FORMS (18VAC150-20)

Licensure Procedure for Veterinarians (rev. 8/07).

Application for a License to Practice Veterinary Medicine (rev. 8/09).

Instructions to the Applicant for Licensure by Examination as a Veterinary Technician (rev. 4/09).

Instructions to the Veterinary Technician Licensure Applicant (rev. 7/11).

Application for a License to Practice Veterinary Technology (rev. 8/09).

Applicant Instructions for New, Upgrading to Full Service, or Change of Location Inspections (rev. 8/07).

Application for Veterinary Establishment Permit (rev. 8/09).

Application for Reinstatement (rev. 8/09).

Licensure Verification - Veterinarian (rev. 7/11).

Licensure Verification - Veterinary Technician (rev. 9/07).

Application for Registration for Volunteer Practice (rev. 8/07).

Sponsor Certification for Volunteer Registration (rev. 8/07).

Application for Registration to Practice as an Equine Dental Technician (eff. 11/07).

Recommendation for Registration as a Equine Dental Technician (eff. 11/07).

Registrants Inventory of Drugs Surrendered, Form DEA-41 (eff. 9/01).

VA.R. Doc. No. R12-2530; Filed October 17, 2011, 11:30 a.m.

TITLE 20. PUBLIC UTILITIES AND TELECOMMUNICATIONS

STATE CORPORATION COMMISSION

Final Regulation

REGISTRAR'S NOTICE: The State Corporation Commission is exempt from the Administrative Process Act in accordance with § 2.2-4002 A 2 of the Code of Virginia, which exempts courts, any agency of the Supreme Court, and any agency that by the Constitution is expressly granted any of the powers of a court of record.

Title of Regulation: **20VAC5-330. Limitations on Disconnection of Electric and Water Service (adding 20VAC5-330-10 through 20VAC5-330-50).**

Statutory Authority: Chapters 500, 662, and 673 of the 2011 Acts of Assembly.

Effective Date: October 31, 2011.

Agency Contact: Timothy R. Faherty, Consumer Services Manager, Division of Energy Regulation, State Corporation Commission, P.O. Box 1197, Richmond, VA 23218, telephone (804) 371-9629, FAX (804) 371-9350, or email tim.faherty@scc.virginia.gov.

Summary:

This regulation establishes limitations on the authority of an investor-owned electric utility, electric cooperative, or public utility providing water service to terminate electric service or water service to the residence of any customer who provides the certification of a licensed physician that the customer or a family member who resides with the customer has a serious medical condition. The regulation also provides a cost recovery mechanism under which electric and water utilities are authorized to recover any losses on customer accounts that are written off or otherwise determined to be uncollectible as a result of the regulation.

Substantive changes to the proposed regulation include: (i) revising the definition of serious medical condition; (ii) revising the steps to be taken by the electric or water service provider upon receipt of a request for a delay from a customer without a Serious Medical Condition Certification Form on file; and (iii) modifying the Serious Medical Condition Certification Form to require the physician completing the form to provide the name of the state in which the physician is licensed.

AT RICHMOND, OCTOBER 18, 2011

COMMONWEALTH OF VIRGINIA, ex rel.

STATE CORPORATION COMMISSION

CASE NO. PUE-2011-00060

Ex Parte: In re: Establishing rules providing limitations on disconnection of electric and water service for persons with serious medical conditions

ORDER ADOPTING REGULATIONS

On July 11, 2011, the State Corporation Commission ("Commission") initiated a rulemaking required by Chapters 500, 662, and 673 of the 2011 Acts of Assembly ("Acts"). Through these Acts, the Virginia General Assembly directed the Commission to conduct a proceeding for the purpose of establishing limitations on the authority of an investor-owned electric utility, electric cooperative, or public utility providing water service to terminate electric service or water service to the residence of any customer who provides the certification of a licensed physician that the customer, or a family member who resides with the customer, has a serious medical condition. The Acts, inter alia, directed the Commission to: (i) establish limitations that are consistent with the public interest; (ii) establish a cost recovery mechanism under which electric and water utilities shall be authorized to recover any losses on customer accounts that are written off or otherwise determined to be uncollectible as a result of these regulations; and (iii) make these regulations effective no later than October 31, 2011. Finally, the Acts provided that in the proceeding establishing these regulations, the Commission was to consult with the Commissioner of Health, the Commissioner of Social Services, the Virginia Poverty Law Center, the Virginia League of Social Services Executives, electric utilities, water utilities, and other persons the Commission deems appropriate ("Designated Entities").

The Commission's July 11, 2011 Order for Notice and Comment ("July 11, 2011 Order"), set out proposed rules ("Proposed Rules") that had been prepared by the Staff of the Commission ("Staff") after consulting with the Designated Entities and other interested parties. The July 11, 2011 Order also provided that public notice of the Proposed Rules be given so as to afford any persons or entities, including the Designated Entities, an opportunity to comment formally on the Proposed Rules, to request a hearing thereon, or to propose modifications or supplements to the Proposed Rules.

Notice of the proceeding was published in the Virginia Register on August 1, 2011, and in newspapers of general circulation throughout the Commonwealth.[1] Interested persons were directed to file any comments and requests for hearing on the Proposed Rules on or before August 16, 2011.

Comments in this proceeding were submitted by: Delegate Ward L. Armstrong, Delegate Gregory D. Habeeb, Delegate Salvatore R. Iaquinto, The Virginia Poverty Law Center,

David M. Debiasi for AARP Virginia, Jean Duggan for Bay Aging, Virginia Electric and Power Company, Appalachian Power Company, Kentucky Utilities Company d/b/a Old Dominion Power, the Virginia Electric Cooperatives,[2] Bluefield Valley Waterworks Company, Aqua Virginia, Inc., Virginia American Water Company, Sarah R. Ebbett, Mehdi Nabavi, Bobbie Henley, Becky J. Smith, Mary S. Martin, Avi Dey, Gwendolyn D. Cook, and Lennis J. Harris. The Commission did not receive a request for a hearing on the Proposed Rules.

As directed by the July 11, 2011 Order, the Staff filed a report ("Staff Report") on August 30, 2011, in which the Staff, in part, reviewed the comments on the Proposed Rules. The Staff Report also presented revisions to the Proposed Rules to the Commission after consideration of the comments filed in this proceeding.

NOW THE COMMISSION, upon consideration of this matter, is of the opinion and finds that, except as described below, the proposed regulations as revised and set forth in the Staff Report should be adopted as Chapter 330 of the Virginia Administrative Code ("VAC").

With regard to the definition of "serious medical condition" set forth in 20 VAC 5-330-20, we find that, upon review of the Acts directing that we undertake this rulemaking, a definition more closely following the language initially proposed by the Virginia Department of Health should be adopted at this juncture.[3]

Furthermore, we find that language added in 20 VAC 5-330-40 B, which provides that a customer is entitled to only one 10-day delay in a 12-month period for purposes of securing a completed Serious Medical Condition Certification Form, should be revised as set forth herein.[4]

These regulations will be titled "Limitations on Disconnection of Electric and Water Service" and will be made effective as of October 31, 2011.

Accordingly, IT IS ORDERED THAT:

(1) The Commission's regulations regarding Limitations on Disconnection of Electric and Water Service, 20 VAC 5-330-10 *et seq.,* are hereby adopted as shown in Appendix A to this Order, and shall become effective as of October 31, 2011.

(2) A copy of these regulations as set out in Appendix A of this Order shall be forwarded to the Registrar of Regulations for publication in the Virginia Register.

(3) There being nothing further to come before the Commission, this case hereby is dismissed from the Commission's docket of active cases, and the papers filed herein shall be placed in the Commission's file for ended causes.

AN ATTESTED COPY hereof shall be sent by the Clerk of the Commission to all persons on the official Service List in this matter. The Service List is available from the Clerk of the Commission, c/o Document Control Center, 1300 East Main Street, First Floor, Tyler Building, Richmond, Virginia 23219. A copy hereof shall be delivered to the Commission's Office of General Counsel and Divisions of Energy Regulation and Public Utility Accounting.

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[1] *See* Memoranda from Laura S. Martin of the Commission's Division of Information Resources, filed in this docket on August 3, 2011, and August 15, 2011.

[2] The Virginia Electric Cooperatives include A&N Electric Cooperative, BARC Electric Cooperative, Central Virginia Electric Cooperative, Community Electric Cooperative, Craig-Botetourt Electric Cooperative, Mecklenburg Electric Cooperative, Northern Neck Electric Cooperative, Northern Virginia Electric Cooperative, Powell Valley Electric Cooperative, Prince George Electric Cooperative, Rappahannock Electric Cooperative, Shenandoah Valley Electric Cooperative, and Southside Electric Cooperative and their statewide service organization, the Virginia, Maryland, and Delaware Association of Electric Cooperatives.

[3] Staff Report at Attachment 2.

[4] With this revision we clarify that while this 10-day delay under this subsection is required only once in a 12-month period, 20 VAC 5-330-40 A, C, and D provide that a 30-day delay in service termination may be exercised twice in a 12-month period once a completed Serious Medical Condition Certification Form is filed.

CHAPTER 330
LIMITATIONS ON DISCONNECTION OF ELECTRIC AND WATER SERVICE

20VAC5-330-10. Applicability and scope.

This chapter is promulgated pursuant to Chapters 500, 662, and 673 of the 2011 Acts of Assembly. The provisions in this chapter apply to investor-owned electric utilities, electric cooperatives, and public utilities providing water service. In order to promote public health and safety, this chapter is designed to establish reasonable limitations, consistent with the public interest, on the ability of investor-owned electric utilities, electric cooperatives, and public utilities providing water service to terminate service to residential customers who have a serious medical condition or to residential customers who reside with a family member with a serious medical condition and to provide such residential customers adequate time prior to the termination of electric or water service to either enter into a payment plan with the utility or make other arrangements for housing or medical care. Nothing in this chapter shall be interpreted to require an investor-owned electric utility, electric cooperative, or public utility providing water service to terminate service after the expiration of the timelines established herein.

[Furthermore, nothing in this chapter shall be interpreted to prohibit an investor-owned electric utility, electric cooperative, or public utility providing water service from terminating service in the event of an emergency or in the event an investor-owned electric utility, electric cooperative, or public utility providing water service reasonably believes

that theft of service or meter tampering has occurred in connection with the service.]

20VAC5-330-20. Definitions.

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

"Licensed physician" means a person licensed to practice medicine or osteopathic medicine (M.D. or D.O.) in any of the 50 states or the District of Columbia.

"Serious medical condition" means a physical or psychiatric condition that requires medical intervention to prevent further disability, loss of function, or death. Such conditions are characterized by a need for ongoing medical supervision or the consultation of a physician. A serious medical condition carries with it a risk to health beyond that experienced by the majority of children and adults in their day-to-day minor illnesses and injuries. Individuals with a serious medical condition may require administration of specialized treatments and may be dependent on medical technology such as ventilators, dialysis machines, enteral or parenteral nutrition support, or continuous oxygen. Medical interventions may include medications with special storage requirements, use of powered equipment, or access to water. [~~Further, a medical condition shall only be considered a serious medical condition if a licensed physician certifies that electric or water service is necessary in the treatment of the medical condition.~~]

"Serious Medical Condition Certification Form" means a written document, approved by the State Corporation Commission, signed by (i) a licensed physician, (ii) the customer, and (iii) the patient or the patient's legal guardian or power of attorney. The Serious Medical Condition Certification Form shall (i) identify the medical condition of the customer or family member who resides with the customer, (ii) include a certification by a licensed physician that the medical condition meets the definition of a serious medical condition, (iii) identify the anticipated length of time that the serious medical condition will persist, and (iv) identify any equipment prescribed or treatment required for the medical condition.

20VAC5-330-30. General provisions.

A. A request for a waiver of any of the provisions of this chapter shall be considered by the State Corporation Commission on a case-by-case basis, and may be granted upon such terms and conditions as the State Corporation Commission may impose.

B. An investor-owned electric utility, electric cooperative, or public utility providing water service shall use the Serious Medical Condition Certification Form (Form SMCC) provided on the State Corporation Commission's website at http://www.scc.virginia.gov/pue/rules.aspx unless the State Corporation Commission approves the use of an alternative form.

C. An investor-owned electric utility, electric cooperative, or public utility providing water service may require a customer to provide it a new Serious Medical Condition Certification Form either annually or upon the expiration of the anticipated length of time that the serious medical condition will persist if such time is less than 12 months.

D. An investor-owned electric utility, electric cooperative, or public utility providing water service may take reasonable actions to verify the validity of the Serious Medical Condition Certification Form. Such actions include, but are not limited to, contacting (i) the licensed physician to confirm the medical condition of the patient and the treatment or treatments associated therewith; (ii) the Virginia Department of Health Professions, or the applicable state's licensing board, to verify that the physician is a licensed physician; or (iii) the customer to verify that the patient currently resides at the residence.

E. In the event that the investor-owned electric utility, electric cooperative, or public utility providing water service is of the opinion that the information provided on the Serious Medical Condition Certification Form is invalid, or otherwise is of the opinion that there has been fraud or abuse of the process provided in this chapter, it may petition the State Corporation Commission for redress pursuant to 5VAC5-20-100 B, State Corporation Commission's Rules of Practice and Procedure.

20VAC5-330-40. Limitations on service termination to residential customers.

A. Following the issuance of a notice of intent to terminate service pursuant to § 56-247.1 [~~D or F~~ A 4 or 6] of the Code of Virginia, an investor-owned electric utility, electric cooperative, or public utility providing water service shall, upon request from a residential customer who has a Serious Medical Condition Certification Form filed with the utility, delay termination of service for a minimum of an additional 30 calendar days beyond the expiration of the notice.

B. Following the issuance of a notice of intent to terminate service pursuant to § 56-247.1 [~~D or F~~ A 4 or 6] of the Code of Virginia, an investor-owned electric utility, electric cooperative, or public utility providing water service shall, upon request from a residential customer who does not have a Serious Medical Condition Certification Form filed with the utility, delay termination of service for 10 calendar days upon oral or written notification from a residential customer that such customer or a family member residing with the customer has a serious medical condition. The 10-calendar day delay in service termination shall commence on the date the investor-owned electric utility, electric cooperative, or public utility providing water service receives notification. At the time of

such notification, the investor-owned electric utility, electric cooperative, or public utility providing water service shall:

1. Advise the residential customer that service termination will be delayed for 10 calendar days pending receipt of the Serious Medical Condition Certification Form;

2. Provide the customer access to the Serious Medical Condition Certification Form via its website [or advise the consumer that access can be obtained via the Commission's website];

3. Not later than [~~the next~~ two] business [~~day~~ days after receiving notification], mail, email, or deliver via facsimile transmission a copy of the Serious Medical Condition Certification Form upon a request from the customer; and

4. Not later than [~~the next~~ two] business [~~day~~ days after receiving notification], mail the customer a letter advising the customer:

a. The date notification was received;

b. The date that the 10-calendar day delay expires; and

c. That upon receipt of a Serious Medical Condition Certification Form within the 10-calendar day time period provided for in this subsection, it will delay the termination of service 30 calendar days from the date of termination initially noticed.

Upon receipt of a Serious Medical Condition Certification Form within the 10-calendar day time period provided for in this subsection, an investor-owned electric utility, electric cooperative, or public utility providing water service shall provide the 30-calendar day delay in termination of service required in subsection A of this section. [An investor-owned electric utility, electric cooperative, or public utility providing water service shall not be required to provide a 10-calendar day delay in service termination pursuant to this subsection more than once in a 12-month period.]

C. In the event an investor-owned electric utility, electric cooperative, or public utility providing water service has terminated service to a residential customer within the preceding 14 calendar days, the investor-owned electric utility, electric cooperative, or public utility providing water service shall promptly restore service upon (i) receipt of a Serious Medical Condition Certification Form, or confirmation of such a form on file; and (ii) a request from the customer to reconnect service. The investor-owned electric utility, electric cooperative, or public utility providing water service shall not be permitted to require any payment as a condition to reconnect; however, it may charge the customer, on the next monthly bill, any applicable reconnection fees that are on file in its State Corporation Commission approved tariffs and terms and conditions of service. Following the reconnection of service, the investor-owned electric utility, electric cooperative, or public utility providing water service shall delay termination of service for a minimum of 30 calendar days from the date it reconnects the customer.

D. An investor-owned electric utility, electric cooperative, or public utility providing water service shall permit a residential customer to delay termination of service under this chapter two times within a 12-month period. The 30-calendar day delays may be consecutive. Nothing in this chapter shall prohibit an investor-owned electric utility, electric cooperative, or public utility providing water service from providing to a customer additional delay from the termination of service beyond the delay required.

E. During the delay in service termination pursuant to subsections A and C of this section, the investor-owned electric utility, electric cooperative, or public utility providing water service shall:

1. In the event the investor-owned electric utility, electric cooperative, or public utility providing water service is able to establish payment arrangements with the customer, mail to the customer a letter detailing the agreement not later than three business days after the agreement on payment arrangements is made; or

2. In the event the investor-owned electric utility, electric cooperative, or public utility providing water service is unable to establish payment arrangements with the customer, mail the customer a letter, not later than 10 calendar days prior to the expiration of the 30-calendar day delay required by this chapter, advising the customer of (i) the date that service may be terminated and (ii) any payment arrangements available to the customer. The letter shall also advise the customer of his right to delay service termination pursuant to this chapter twice within a 12-month period.

F. The investor-owned electric utility, electric cooperative, or public utility providing water service shall (i) maintain a copy of any letters required under this section for a minimum of 12 months and (ii) provide such copies to the State Corporation Commission's Division of Energy Regulation upon request.

20VAC5-330-50. Cost recovery mechanism.

A. An investor-owned electric utility, electric cooperative, or public utility providing water service shall be permitted to recover losses on customer accounts resulting from the implementation of this chapter in the same manner as other uncollectable costs are recovered through rates.

B. An investor-owned electric utility, electric cooperative, or public utility providing water service shall maintain write-offs and recoveries of uncollectable accounts in such a manner that would allow those amounts written off as a result of the implementation of this chapter to be separately identified.

NOTICE: The following form used in administering the regulation was filed by the agency. The form is not being published; however, online users of this issue of the Virginia Register of Regulations may click on the name to access the form. The form is also available through the agency contact or at the Office of the Registrar of Regulations, General Assembly Building, 2nd Floor, Richmond, Virginia 23219.

FORMS (20VAC5-330)

Serious Medical Condition Certification Form, Form SMCC (10/11).

VA.R. Doc. No. R11-2908; Filed October 18, 2011, 11:25 a.m.

DEPARTMENT OF ENVIRONMENTAL QUALITY

Proposed Enforcement Action for Aqua Virginia Utilities, Inc.

An enforcement action has been proposed for Aqua Virginia Utilities, Inc. in order to complete corrective action requirements on the recently purchased Manakin Farms subdivision treatment system located at Route 6 & Hermitage Road in Goochland County, Virginia. Manakin Water and Sewerage Company was issued an enforcement action on June 25, 2010, to complete corrective action on the Manakin Farms wastewater treatment system. This proposed action transfers the corrective action requirements to Aqua Virginia Utilities, Inc. A description of the proposed action is available at the Department of Environmental Quality office named below or online at www.deq.virginia.gov. Frank Lupini will accept comments by email at frank.lupini@deq.virginia.gov, FAX (804) 527-5106, or postal mail Department of Environmental Quality, Piedmont Regional Office, 4949-A Cox Road, Glen Allen, VA, 23060, from November 7, 2011, to December 7, 2011.

Revised Notice of Bacteria TMDL Modification of James River and Tributaries – Lower Piedmont Region in Goochland, Fluvanna, Louisa, Powhatan, and Cumberland Counties, Virginia

The Department of Environmental Quality (DEQ) seeks public comment from interested persons on proposed minor modifications of the total maximum daily loads (TMDLs) developed for impaired segments: Byrd Creek, Beaverdam Creek, Fine Creek, and the James River (segments upper H33R-01 and lower H38R-04).

A TMDL of E. coli was developed to address the bacterial impairments in the waterways and counties mentioned above. This TMDL was approved by the Environmental Protection Agency on June 11, 2008. The report is available at http://www.deq.virginia.gov/tmdl/apptmdls/jamesrvr/jmsgrp2.pdf. The DEQ seeks written comments from interested persons on 38 minor modifications for this TMDL.

Six modifications are proposed for the Byrd Creek TMDL. Modifications one through four are to add domestic dischargers (VAG408275, VAG408281, VAG408344, VAG408404), which are single family home facilities with a design flow each of 0.001 million gallons per day (MGD). Facility VAG408275 discharges to Byrd Creek Un-named Tributary (UT), both facilities VAG408281 and VAG408344 discharge to Phils Creek UT, and facility VAG408404 discharges to Venable Creek UT. All four tributaries lie within the Byrd Creek drainage. Based on the design flow at the standard, these permits each should have a waste load allocation (WLA) of 1.74E+09 colony forming units per year (cfu/yr) for E. coli in the Byrd Creek TMDL. DEQ proposes to subtract the combined load of these permits from the "Future Growth" load. Modifications five and six are to change permit numbers for domestic dischargers VAG406343 and VAG406346, which both discharge to Venable Creek UT in the Byrd Creek drainage. These two facilities' numbers will now be identified in the report as VAG406521 and VAG406520, respectively. The final revised "Future Growth" load as a result of modifications one through four will equal 8.87E+10 (cfu/yr) E. coli. The proposed changes for the Byrd Creek TMDL are equal to <1.0%.

Three modifications are proposed for the Beaverdam Creek TMDL. First, DEQ proposes to remove facility Huguenot Academy (VA0063037), which should not have been given a waste load allocation (WLA) in the Beaverdam Creek TMDL because it discharges to the Fine Creek drainage. The WLA of 6.96E+09 (cfu/yr) E. coli based on a maximum discharge of 0.004 MGD will be added to the "Future Growth" load for the Beaverdam Creek TMDL. Second, DEQ proposes to remove facility James River Correctional Center (VA0020681), which no longer discharges to Beaverdam Creek. The WLA of 3.76E+11 (cfu/yr) E. coli based on a maximum discharge of 0.216 MGD will be added to the "Future Growth" load for Beaverdam Creek. Third, DEQ proposes to add a new WLA, Oilville Waste Water Treatment Plant (WWTP) (VA0092428), which is a municipal facility with a maximum discharge of 0.3 MGD, by subtracting from the "Future Growth" load of Beaverdam Creek. The WLA to be assigned to this facility based on design flow at the standard is equal to 5.23E+11 (cfu/yr) E. coli. The revised "Future Growth" load in Beaverdam Creek as a result of these three modifications will be 2.57E+12 (cfu/yr). The proposed changes for the Beaverdam Creek TMDL are equal to < 1.0%.

One modification is proposed for the Fine Creek TMDL, which is to add a WLA for discharger Huguenot Academy (VA0063037), originally allocated to Beaverdam Creek by mistake. A WLA of 6.96E+09 (cfu/yr) E. coli will be assigned to the facility from the "Future Growth" load of Fine Creek. The revised "Future Growth" load in Fine Creek as a result of this modification will be 2.96E+10 (cfu/yr). The proposed changes for the Fine Creek TMDL are equal to < 1.0%.

Thirteen modifications are proposed for the upper James River (H33R-01) segment. The previous total WLA for the James River upper segment, 3.54E+11 (cfu/yr) E. coli, was incorrect. DEQ proposes to change this number to 3.50E+11 (cfu/yr) in the TMDL document, which is the correct total WLA for the James River upper segment. The correction of the James River upper segment total WLA affects no other allocations in the TMDL and is equal to <1.0%. The second and third modifications are to remove the WLAs for domestic dischargers VAG404239 and VAG404240, which are domestic facilities which were never constructed and whose

permits have been allowed to expire. DEQ proposes to add the combined load of these permits, which were each given a WLA of 1.74E+09 (cfu/yr) E. coli in the upper James River (H33R-01) segment TMDL, to the "Future Growth" load. Modifications four through twelve for the upper James River (H33R-01) segment include the addition of nine domestic dischargers (VAG404226, VAG404262, VAG404276, VAG404277, VAG406347, VAG408275, VAG408281, VAG408344, and VAG408404) with a maximum discharge of 0.001 MGD each. VAG404226 discharges to Maple Swamp Creek UT in the upper James River segment drainage, both VAG404262 and VAG404276 discharge to Stegers Creek UT in the upper James River segment drainage, VAG404277 discharges to Horsepen Branch UT in the upper James River segment drainage, VAG406347 discharges to the Venable Creek UT in the Byrd Creek drainage, VAG408275 discharges to Byrd Creek UT in the Byrd Creek drainage, both VAG408281 and VAG408344 discharge to Phils Creek UT in the Byrd Creek drainage, and VAG408404 discharges to Venable Creek UT in the Byrd Creek drainage. Based on the design flow at the standard, these permits each should have a WLA of 1.74E+09 (cfu/yr) for E. coli in the upper James River (H33R-01) segment TMDL. DEQ proposes a WLA of 1.74E+09 (cfu/yr) be assigned to each discharger, subtracted from the "Future Growth" for the James River upper segment. Modifications thirteen and fourteen are to change permit numbers for domestic dischargers VAG406343 and VAG406346, which both discharge to Venable Creek UT in the Byrd Creek drainage and received a WLA in the James River "upper" segment. These two facilities numbers will now be identified in the report as VAG406521 and VAG406520, respectively. The revised "Future Growth" as a result of modifications two through twelve will be 2.70E+11 (cfu/yr) E. coli. The proposed changes for the upper James River (H33R-01) TMDL are equal to <1.0%.

Fifteen modifications are proposed for the lower James River (H38R-04) TMDL. Modifications one through three are to correct the original values of Future Growth, total WLA, and LA, which were 6.54E+12, 7.91E+12, and 3.91E+15 (cfu/yr) E.coli, respectively. Future Growth values are calculated as five times the WLA of Individual VPDES dischargers. However, 6.54E+12 (cfu/yr) is not the correct original future growth value; it is 6.82E+12 (cfu/yr) E. coli. The total WLA is the addition of each individual WLAs plus Future Growth. Because Future Growth was calculated incorrectly, 7.91E+12 (cfu/yr) is not the correct total WLA value, it is 8.20E+12 (cfu/yr) E. coli. The LA is calculated by subtracting the total WLA from the TMDL. Because the total WLA was calculated based on an incorrect value of Future Growth, 3.91E+15 (cfu/yr) is not the correct LA value, it is 3.90E+15 (cfu/yr) E.coli. The original Future Growth correction will not be reflected in the revised TMDL document; however, it is used as the baseline for calculating the revised Future Growth as a result of other modifications listed below. DEQ proposes to correct the reported total WLA and LA values to 8.20E+12 and 3.90E+15 (cfy/yr) E.coli, respectively, in the modified TMDL document. The fourth and fifth modifications are to remove the WLAs for domestic dischargers VAG404239 and VAG404240, which are domestic facilities never constructed and whose permits have been allowed to expire. DEQ proposes to add the combined load of these permits, which were each given a WLA of 1.74E+09 (cfu/yr) E. coli in the upper James River (H33R-01) segment TMDL, to the "Future Growth" load. Modifications six through twelve for the lower James River (H38R-04) segment include the addition of seven domestic dischargers (VAG404262, VAG404276, VAG404277, VAG408275, VAG408281, VAG408344, and VAG408404) with a maximum discharge of 0.001 MGD each. Based on the design flow at the standard, these permits each should have a WLA of 1.74E+09 (cfu/yr) for E. coli in the TMDL. DEQ proposes a WLA of 1.74E+09 (cfu/yr) be assigned to each discharger, subtracted from the "Future Growth" load for the James River lower segment. For modification thirteen, DEQ proposes the removal of the WLA for facility DOC Powhatan Correctional Center (VA020699), whose outfall discharges below the James River "lower" impaired segment. The WLA of 8.09E+11 (cfu/yr) E. coli based on a maximum discharge of 0.465 MGD will be added to the "Future Growth" load for James River "lower" segment. Modifications fourteen and fifteen are to change permit numbers for domestic dischargers VAG406343 and VAG406346, which both discharge to Venable Creek UT in the Byrd Creek drainage and received a WLA in the James River "lower" segment. These two facilities' numbers will now be identified in the report as VAG406521 and VAG406520, respectively. The revised "Future Growth" as a result of modifications one and four through thirteen will be 7.62E+12(cfu/yr) E. coli for the lower James River segment. The proposed changes for the lower James River (H38R-04) TMDL are equal to <1.0%.

The proposed WLA changes above will neither cause nor contribute to the nonattainment of the James River basin. The public comment period for these modifications will end on December 7, 2011. Please send comments to Margaret Smigo, Department of Environmental Quality, Piedmont Regional Office, 4969-A Cox Road, Glen Allen, VA 23060, email at margaret.smigo@deq.virginia.gov, or FAX (Attn. Margaret Smigo) at (804) 527-5106. Following the comment period, a modification letter and any comments received will be sent to EPA for approval.

Proposed Consent Order for KVK Precision Specialties, Inc.

An enforcement action has been proposed for KVK Precision Specialties, Inc. for violations in Page County. A proposed consent order describes a settlement to resolve an unauthorized discharge. A description of the proposed action is available at the Department of Environmental Quality office named below or online at www.deq.virginia.gov. Steven W. Hetrick will accept comments by email at

steven.hetrick@deq.virginia.gov, FAX (540) 574-7878, or postal mail Department of Environmental Quality, Valley Regional Office, P.O. Box 3000, 4411 Early Road, Harrisonburg, VA 22801, from November 7, 2011, to December 7, 2011.

Total Maximum Daily Loads for Long Meadow Run and Turley Creek in Rockingham County

The Department of Environmental Quality (DEQ) and the Department of Conservation and Recreation (DCR) seek written and oral comments from interested persons on the development of total maximum daily loads (TMDLs) for Long Meadow Run and Turley Creek in Rockingham County. These streams were listed in 2002 as impaired due to violations of the state's general water quality standard (benthic) for aquatic life. The aquatic life impairment on Long Meadow Run extends from its headwaters to the confluence with the North Fork Shenandoah River, which is a total of 8.53 miles. The Turley Creek aquatic life impairment extends a total of 4.01 miles from its headwaters to the confluence with the North Fork Shenandoah River.

Section 303(d) of the Clean Water Act and § 62.1-44.19:7 C of the Code of Virginia require DEQ to develop TMDLs for pollutants responsible for each impaired water contained in Virginia's 303(d) TMDL Priority List and Report.

The first public meeting on the development of these TMDLs will be held on Wednesday, November 16, 2011, 7 p.m. at J. Frank Hillyard Middle School, 226 Hawks Hill Drive, Broadway, VA 22815. Directly following the meeting will be the first Technical Advisory Committee meeting to discuss several technical issues and gather additional, specific input. All are welcome to attend either or both meetings.

The public comment period for the first public meeting will end on December 19, 2011. Written comments should include the name, address, and telephone number of the person submitting the comments and should be sent to Tara Sieber, Department of Environmental Quality, 4411 Early Road, P.O. Box 3000, Harrisonburg, VA 22801, telephone (540) 574-7870, FAX (540) 574-7878, or email tara.sieber@deq.virginia.gov.

Total Maximum Daily Load for Powells Creek, Quantico Creek, South Fork Quantico Creek, North Branch Chopawamsic Creek, Austin Run, Accokeek Creek, Potomac Creek, Potomac Run, and an Unnamed Tributary to the Potomac River

Announcement of total maximum daily load (TMDL) studies to restore water quality in the bacteria impaired waters of Powells Creek, Quantico Creek, South Fork Quantico Creek, North Branch Chopawamsic Creek, Austin Run, Accokeek Creek, Potomac Creek, Potomac Run, and an Unnamed Tributary to the Potomac River.

Purpose of notice: The Virginia Department of Environmental Quality (DEQ) and the Virginia Department of Conservation and Recreation (DCR) announce the third Technical Advisory Committee (TAC) meeting to address the development of TMDLs for several tributaries to the Potomac River.

Technical advisory committee meeting: Tuesday, November 15, 2011, 1:30 p.m. to 3 p.m., John M. Porter Memorial Library, Meeting Room A, 2001 Parkway Blvd., Stafford, VA 22554.

Meeting description: This is the third TAC meeting to address the bacteria TMDL studies for Powells Creek, Quantico Creek, South Fork Quantico Creek, North Branch Chopawamsic Creek, Austin Run, Accokeek Creek, Potomac Creek, Potomac Run, and an Unnamed Tributary to the Potomac River. The purpose of the TAC is to provide technical input and insight for the project, and to assist with stakeholder and public participation.

Description of study: Portions of the following streams have been identified as impaired on the Clean Water Act § 303(d) list for not supporting Virginia's water quality recreational use standard due to exceedances of the bacteria criterion:

Waterbody Name	Watershed Location	Segment Size	Cause	Segment Description
Powells Creek	Prince William County	4.62 miles	Escherichia coli	Segment begins approximately 0.2 rivermiles below Lake Montclair and continues downstream until the end of the free-flowing waters of Powells Creek.
Quantico Creek	Prince William County Town of Dumfries	1.45 miles	Escherichia coli	Segment begins at the confluence with South Fork Quantico Creek, approximately 0.75 rivermile upstream from I-95, and continues downstream until the start of the tidal waters of Quantico Bay.
South Fork Quantico Creek	Prince William County Town of Dumfries	4.63 miles	Escherichia coli	Segment begins at the headwaters of the South Fork Quantico Creek and continues downstream until the start of the impounded waters, adjacent to what is labeled as Mawavi Camp No 2 on the Joplin quad.
North Branch Chopawamsic Creek	Stafford County Prince William County	6.9 miles	Escherichia coli	Segment begins at the headwaters of North Branch Chopawamsic Creek and continues downstream until the confluence with Middle Branch.
Austin Run	Fauquier County Stafford County	0.79 miles	Fecal Coliform	Segment begins at the confluence with an unnamed tributary to Austin Run (streamcode XGQ) and continues downstream until the confluence with Aquia Creek.
Accokeek Creek	Stafford County	4.21 miles	Escherichia coli	Segment begins at the confluence with an unnamed tributary to Accokeek Creek (rivermile 8.62), approximately 0.33 rivermile downstream from Route 1, and continues downstream until the end of the free-flowing waters.
Potomac Creek	Stafford County	2.18 miles	Escherichia coli	Segment begins at the railroad crossing at the west end of swamp, upstream from Route 608, and continues downstream until the east end of swamp.
Potomac Run	Stafford County	6.13 miles	Escherichia coli	Segment begins at the headwaters of Potomac Run and continues downstream until the confluence with Long Branch.
Unnamed Tributary to the Potomac River	Stafford County	2.9 miles	Escherichia coli	Segment begins at the headwaters of the unnamed tributary and continues downstream until its confluence with the Potomac River.

Virginia agencies are working to identify sources of bacteria contamination in these stream segments. During this study, DEQ will develop a total maximum daily load (TMDL) for each of the impaired stream segments. A TMDL is the total amount of a pollutant a water body can receive and still meet water quality standards. To restore water quality, pollutant levels have to be reduced to the TMDL allocated amount.

How to comment: The public comment period on the materials presented at the TAC meeting will extend from November 15, 2011, to December 15, 2011. DEQ accepts written comments by email, fax, or postal mail. Written

comments should include the name, address, and telephone number of the person commenting, and be received by DEQ during the comment period. Please send all comments to the contact listed below.

Contact for additional information: Katie Conaway, Virginia Department of Environmental Quality, 13901 Crown Court, Woodbridge, VA 22193, telephone (703) 583-3804, or email katie.conaway@deq.virginia.gov.

Restore Water Quality in Tributaries of the New River

Announcement of an effort to restore water quality in the following tributaries of the New River: South Fork Reed Creek, Mill Creek, Stony Fork, Tate Run, Reed Creek, Miller Creek, and Cove Creek in Wythe County, Virginia.

Public meeting location: Wythe Bland Conference Room, Wythe County Community Hospital, 600 West Ridge Road, Wytheville, Virginia, on November 15, 2011, from 6 p.m. to 8 p.m.

Purpose of notice: The Virginia Department of Environmental Quality (DEQ) and the Department of Conservation and Recreation are announcing an effort to restore water quality, a public comment opportunity, and public meeting.

Meeting description: First public meeting on a study to restore water quality.

Description of study: DEQ has been working to identify sources of bacterial contamination in South Fork Reed Creek, Mill Creek, Stony Fork, Tate Run, Reed Creek, Miller Creek, and Cove Creek in Wythe County, Virginia. The streams are impaired for failure to meet the recreational use because of fecal coliform bacteria violations and violations of the E. coli standard.

During the study, DEQ will determine the sources of bacterial contamination and develop a total maximum daily load (TMDL) for bacteria. To restore water quality, contamination levels must be reduced to the TMDL amount. A TMDL is the total amount of a pollutant a water body can contain and still meet water quality standards.

How a decision is made: The development of a TMDL includes public meetings and a public comment period once the study report is drafted. After public comments have been considered and addressed, DEQ will submit the TMDL report to the U.S. Environmental Protection Agency for approval.

How to comment: DEQ accepts written comments by email, fax, or postal mail. Written comments should include the name, address, and telephone number of the person commenting and be received by DEQ during the comment period, November 15, 2011, to December 15, 2011. DEQ also accepts written and oral comments at the public meeting announced in this notice.

To review fact sheets: Fact sheets are available on the impaired waters from the contacts below or on the DEQ website at www.deq.virginia.gov/tmdl.

Contact for additional information: Martha Chapman, TMDL Coordinator, Virginia Department of Environmental Quality, Southwest Regional Office, 355 Deadmore Street, P.O. Box 1688, Abingdon, VA 24212-1688, telephone (276) 676-4800, FAX (276) 676-4899, or email martha.chapman@deq.virginia.gov.

Proposed Enforcement Action for S.B. Cox Ready Mix, Inc.

An enforcement action has been proposed for S.B. Cox Ready Mix, Inc. for alleged violations at four cement ready mix plants. The location of the facilities where the violations occurred are Route 250 West of Little Tuckahoe Creek in Goochland County, 1601 Portugee Road in Henrico County, VA, 16456 Washington Highway in Doswell, VA, and 1920 Anderson Highway in Powhatan County, VA. The order requires corrective action and payment of a civil charge. A description of the proposed action is available at the DEQ office named below or online at www.deq.virginia.gov. Frank Lupini will accept comments by email at frank.lupini@deq.virginia.gov, FAX (804) 527-5106, or postal mail Department of Environmental Quality, Piedmont Regional Office, 4949-A Cox Road, Glen Allen, VA 23060, from November 7, 2011, to December 7, 2011.

Total Maximum Daily Load for Sugarland Run, Mine Run, and Pimmit Run

Announcement of total maximum daily load (TMDL) studies to restore water quality in the bacteria impaired waters of Sugarland Run, Mine Run, and Pimmit Run.

Purpose of notice: The Virginia Department of Environmental Quality (DEQ) and the Virginia Department of Conservation and Recreation (DCR) announce the third Technical Advisory Committee (TAC) meeting to address the development of TMDLs for several tributaries to the Potomac River.

Technical advisory committee meeting: Wednesday, November 16, 2011, 1:30 p.m. to 3:30 p.m., Great Falls Library, Meeting Room, 9830 Georgetown Pike, Great Falls, Virginia 22066.

Meeting description: This is the third TAC meeting to address the bacteria TMDL studies for Sugarland Run, Mine Run, and Pimmit Run. The purpose of the TAC is to provide technical input and insight for the project, and to assist with stakeholder and public participation.

Description of study: Portions of the following streams have been identified as impaired on the Clean Water Act § 303(d) list for not supporting Virginia's water quality recreational use standard due to exceedances of the bacteria criterion:

Waterbody Name	Watershed Location	Segment Size	Cause	Segment Description
Sugarland Run	Fairfax County Loudoun County Town of Herndon	0.95 miles	Escherichia coli	Segment begins at the confluence with Folly Lick Branch, at approximately rivermile 5.75, and continues downstream until the boundary of the PWS designation area, at rivermile 4.82.
Sugarland Run	Fairfax County Loudoun County Town of Herndon	4.77 miles	Escherichia coli	Segment begins at the boundary of the PWS designation area, at rivermile 4.82, and continues downstream until the confluence with the Potomac River.
Mine Run	Fairfax County	0.93 miles	Escherichia coli	Segment begins at the confluence with an unnamed tributary to Mine Run, approximately 0.5 rivermile upstream from River Bend Road, and continues downstream until the confluence with the Potomac River.
Pimmit Run	Arlington County Fairfax County	1.62 miles	Escherichia coli	Segment begins at the confluence with Little Pimmit Run, approximately 0.1 rivermile downstream from Route 695, and continues downstream until the confluence with the Potomac River.
Pimmit Run	Arlington County Fairfax County	2.46 miles	Escherichia coli	Segment begins at the Route 309 bridge crossing, at rivermile 4.16, and continues downstream until the confluence with Little Pimmit Run, approximately 0.1 rivermile downstream from Route 695.
Pimmit Run	Arlington County Fairfax County	3.29 miles	Escherichia coli	Segment begins at the headwaters of Pimmit Run, approximately 0.12 rivermile upstream from Route 7, and continues downstream until the Route 309 bridge crossing, at rivermile 4.16.

Virginia agencies are working to identify sources of bacteria contamination in these stream segments. During this study, DEQ will develop a total maximum daily load (TMDL) for each of the impaired stream segments. A TMDL is the total amount of a pollutant a water body can receive and still meet water quality standards. To restore water quality, pollutant levels have to be reduced to the TMDL allocated amount.

How to comment: The public comment period on the materials presented at the TAC meeting will extend from November 16, 2011, to December 16, 2011. DEQ accepts written comments by email, fax, or postal mail. Written comments should include the name, address, and telephone number of the person commenting, and be received by DEQ during the comment period. Please send all comments to the contact listed below.

Contact for additional information: Katie Conaway, Virginia Department of Environmental Quality, 13901 Crown Court, Woodbridge, VA 22193, telephone (703) 583-3804, or email katie.conaway@deq.virginia.gov.

DEPARTMENT OF FORENSIC SCIENCE

Approval of Field Tests for Detection of Drugs

In accordance with 6VAC40-30, the Regulations for the Approval of Field Tests for Detection of Drugs, and under the authority of the Code of Virginia, the following field tests for detection of drugs are approved field tests:

O D V INCORPORATED
13386 INTERNATIONAL PARKWAY
JACKSONVILLE, FLORIDA 32218-2383

ODV NarcoPouch

Drug or Drug Type:	Manufacturer's Field Test:
Heroin	902 – Marquis Reagent
Amphetamine	902 – Marquis Reagent
Methamphetamine	902 – Marquis Reagent
3,4–Methylenedioxymethamphetamine (MDMA)	902 – Marquis Reagent
Cocaine Hydrochloride	904 or 904B – Cocaine HCl and Base Reagent
Cocaine Base	904 or 904B – Cocaine HCl and Base Reagent
Barbiturates	905 – Dille-Koppanyi Reagent
Lysergic Acid Diethylamide (LSD)	907 – Ehrlich's (Modified) Reagent
Marijuana	908 – Duquenois – Levine Reagent
Hashish Oil	908 – Duquenois – Levine Reagent
Marijuana	909 – K N Reagent
Hashish Oil	909 – K N Reagent
Phencyclidine (PCP) Reagent	914 – PCP Methaqualone
Heroin	922 – Opiates Reagent
Methamphetamine	923 – Methamphetamine/Ecstasy Reagent
3,4–Methylenedioxymethamphetamine (MDMA)	923 – Methamphetamine/Ecstasy Reagent
Heroin	924 – Mecke's (Modified) Reagent
Diazepam	925 – Valium/Ketamine Reagent
Ketamine	925 – Valium/Ketamine Reagent
Ephedrine	927 – Ephedrine Reagent
gamma – Hydroxybutyrate (GHB)	928 – GHB Reagent

ODV NarcoTest

Drug or Drug Type:	Manufacturer's Field Test:
Heroin	7602 – Marquis Reagent
Amphetamine	7602 – Marquis Reagent
Methamphetamine	7602 – Marquis Reagent
3,4–Methylenedioxymethamphetamine (MDMA)	7602 – Marquis Reagent
Barbiturates	7605 – Dille-Koppanyi Reagent
Lysergic Acid Diethylamide (LSD)	7607 – Ehrlich's (Modified) Reagent
Marijuana	7608 – Duquenois Reagent
Hashish Oil	7608 – Duquenois Reagent
Marijuana	7609 – K N Reagent
Hashish Oil	7609 – K N Reagent
Cocaine Hydrochloride	7613 – Scott (Modified) Reagent
Cocaine Base	7613 – Scott (Modified) Reagent
Phencyclidine (PCP)	7614 – PCP Methaqualone Reagent
Heroin	7622 – Opiates Reagent
Methamphetamine	7623– Methamphetamine/Ecstasy Reagent
3,4–Methylenedioxymethamphetamine (MDMA)	7623– Methamphetamine/Ecstasy Reagent
Heroin	7624 – Mecke's Reagent
Diazepam	7625 – Valium/Ketamine Reagent
Ketamine	7625 – Valium/Ketamine Reagent
Ephedrine	7627 – Chen's Reagent - Ephedrine
gamma – Hydroxybutyrate (GHB)	7628 – GHB Reagent

SIRCHIE FINGERPRINT LABORATORIES
100 HUNTER PLACE
YOUNGSVILLE, NORTH CAROLINA 27596

NARK

Drug or Drug Type:	Manufacturer's Field Test:
Narcotic Alkaloids	1 – Mayer's Reagent
Heroin	1 – Mayer's Reagent
Morphine	1 – Mayer's Reagent
Amphetamine	1 – Mayer's Reagent
Methamphetamine	1 – Mayer's Reagent
Opium Alkaloids	2 – Marquis Reagent
Heroin	2 – Marquis Reagent
Morphine	2 – Marquis Reagent
Amphetamine	2 – Marquis Reagent
Methamphetamine	2 – Marquis Reagent
3,4–Methylenedioxymethamphetamine (MDMA)	2 – Marquis Reagent
Meperidine (Demerol) (Pethidine)	2 – Marquis Reagent
Heroin	3 – Nitric Acid
Morphine	3 – Nitric Acid
Cocaine Hydrochloride	4 – Cobalt Thiocyanate Reagent
Cocaine Base	4 – Cobalt Thiocyanate Reagent
Procaine	4 – Cobalt Thiocyanate Reagent
Tetracaine	4 – Cobalt Thiocyanate Reagent
Barbiturates	5 – Dille-Koppanyi Reagent
Heroin	6 – Mandelin Reagent
Morphine	6 – Mandelin Reagent
Amphetamine	6 – Mandelin Reagent
Methamphetamine	6 – Mandelin Reagent
Lysergic Acid Diethylamide (LSD)	7 – Ehrlich's Reagent
Marijuana	8 – Duquenois Reagent
Hashish	8 – Duquenois Reagent
Hashish Oil	8 – Duquenois Reagent
Tetrahydrocannabinol (THC)	8 – Duquenois Reagent
Marijuana	9 – NDB (Fast Blue B Salt) Reagent
Hashish	9 – NDB (Fast Blue B Salt) Reagent
Hashish Oil	9 – NDB (Fast Blue B Salt) Reagent
Tetrahydrocannabinol (THC)	9 – NDB (Fast Blue B Salt) Reagent
Cocaine Base	13 – Cobalt Thiocyanate/Crack Test

NARK II

Drug or Drug Type:	Manufacturer's Field Test:
Narcotic Alkaloids	01 – Marquis Reagent
Heroin	01 – Marquis Reagent
Morphine	01 – Marquis Reagent
Amphetamine	01 – Marquis Reagent
Methamphetamine	01 – Marquis Reagent
3,4–Methylenedioxymethamphetamine (MDMA)	01 – Marquis Reagent
Morphine	02 – Nitric Acid
Heroin	02 – Nitric Acid
Barbiturates	03 – Dille-Koppanyi Reagent
Lysergic Acid Diethylamide (LSD)	04 – Ehrlich's Reagent
Marijuana	05 – Duquenois – Levine Reagent
Hashish	05 – Duquenois – Levine Reagent
Hashish Oil	05 – Duquenois – Levine Reagent
Tetrahydrocannabinol (THC)	05 – Duquenois – Levine Reagent
Cocaine Hydrochloride	07 – Scott's (Modified) Reagent
Cocaine Base	07 – Scott's (Modified) Reagent

Phencyclidine (PCP)	09 – Phencyclidine Reagent
Opiates	10 – Opiates Reagent
Heroin	10 – Opiates Reagent
Morphine	10 – Opiates Reagent
Heroin	11 – Mecke's Reagent
3,4–Methylenedioxymethamphetamine (MDMA)	11 – Mecke's Reagent
Pentazocine	12 – Talwin/ Pentazocine Reagent
Ephedrine	13 – Ephedrine Reagent
Diazepam	14 – Valium Reagent
Methamphetamine	15 – Methamphetamine (Secondary Amines Reagent)
Narcotic Alkaloids	19 – Mayer's Reagent
Heroin	19 – Mayer's Reagent
Morphine	19 – Mayer's Reagent
Amphetamine	19 – Mayer's Reagent
Methamphetamine	19 – Mayer's Reagent
3,4-Methylenedioxypyrovalerone (MDPV)	24 – MDPV (Bath Salts) Reagent
4-Methylmethcathinone (Mephedrone)	25 – Mephedrone (Bath Salts) Reagent

ARMOR HOLDINGS, INCORPORATED
13386 INTERNATIONAL PARKWAY
JACKSONVILLE, FLORIDA 32218-2383

NIK

Drug or Drug Type:	Manufacturer's Field Test:
Heroin	Test A 6071 – Marquis Reagent
Amphetamine	Test A 6071 – Marquis Reagent
Methamphetamine	Test A 6071 – Marquis Reagent
3,4–Methylenedioxymethamphetamine (MDMA)	Test A 6071 – Marquis Reagent
Morphine	Test B 6072 – Nitric Acid Reagent
Barbiturates	Test C 6073 – Dille-Koppanyi Reagent
Lysergic Acid Diethylamide (LSD)	Test D 6074 – LSD Reagent System
Marijuana	Test E 6075 – Duquenois – Levine Reagent
Hashish Oil	Test E 6075 – Duquenois – Levine Reagent
Tetrahydrocannabinol	Test E 6075 – Duquenois – Levine Reagent
Cocaine Hydrochloride	Test G 6077 – Scott (Modified) Reagent
Cocaine Base	Test G 6077 – Scott (Modified) Reagent
Cocaine Hydrochloride	6500 or 6501 – Cocaine ID Swab
Cocaine Base	6500 or 6501 – Cocaine ID Swab
Phencyclidine (PCP)	Test J 6079 – PCP Reagent System
Heroin	Test K 6080 – Opiates Reagent
Heroin	Test L 6081 – Brown Heroin Reagent System
gamma – Hydroxybutyrate (GHB)	Test O 6090 – GHB Reagent
Ephedrine	Test Q 6085 – Ephedrine Reagent
Pseudoephedrine	Test Q 6085 – Ephedrine Reagent
Diazepam	Test R 6085 – Valium Reagent
Methamphetamine	Test U 6087 – Methamphetamine Reagent
3,4–Methylenedioxymethamphetamine (MDMA)	Test U 6087 – Methamphetamine Reagent
Methadone	Test W 6088 – Mandelin Reagent System

MISTRAL SECURITY INCORPORATED
7910 WOODMONT AVENUE SUITE 820
BETHESDA, MARYLAND 20814

Drug or Drug Type:	Manufacturer's Field Test:
Heroin	Detect 4 Drugs Aerosol
Amphetamine	Detect 4 Drugs Aerosol
Methamphetamine	Detect 4 Drugs Aerosol
Marijuana	Detect 4 Drugs Aerosol
Hashish Oil	Detect 4 Drugs Aerosol
Methamphetamine	Meth 1 and 2 Aerosol

Heroin	Herosol Aerosol
Marijuana	Cannabispray 1 and 2 Aerosol
Hashish Oil	Cannabispray 1 and 2 Aerosol
Cocaine Hydrochloride	Coca-Test Aerosol
Cocaine Base	Coca-Test Aerosol
Marijuana	Pen Test – D4D
Phencyclidine	Pen Test – D4D
Amphetamine	Pen Test – D4D
Ketamine	Pen Test – D4D
Methamphetamine	Pen Test – D4D
Ephedrine	Pen Test – D4D
Heroin	Pen Test – D4D
Methadone	Pen Test – D4D
Buprenorphine	Pen Test – D4D
Opium	Pen Test – D4D
Phenobarbital	Pen Test – Barbitusol
Marijuana	Pen Test – Cannabis Test
Phencyclidine	Pen Test – Coca Test
Cocaine Hydrochloride	Pen Test – Coca Test
Cocaine base	Pen Test – Coca Test
Buprenorphine	Pen Test – C&H Test
Cocaine Hydrochloride	Pen Test – C&H Test
Cocaine base	Pen Test – C&H Test
Ephedrine	Pen Test – C&H Test
Ketamine	Pen Test – C&H Test
Heroin	Pen Test – C&H Test
Lysergic Acid Diethylamide (LSD)	Pen Test – C&H Test
Methadone	Pen Test – C&H Test
Methamphetamine	Pen Test – C&H Test
Heroin	Pen Test – Herosol
Methadone	Pen Test – Herosol
Lysergic Acid Diethylamide	Pen Test – LSD Test
Methamphetamine	Pen Test – Meth/X Test
3,4-Methylenedioxymethamphetamine (MDMA)	Pen Test – Meth/X Test
Morphine	Pen Test – Opiatest
Opium	Pen Test – Opiatest
Diazepam	Pen Test – BZO
Ephedrine	Pen Test – Ephedrine
Pseudoephedrine	Pen Test – Ephedrine

JANT PHARMACAL CORPORATION
16255 VENTURA BLVD., #505
ENCINO, CA 91436
Formerly available through:
MILLENNIUM SECURITY GROUP

Accutest IDenta

Drug or Drug Type:	Manufacturer's Field Test:
Marijuana	Marijuana/Hashish (Duquenois-Levine Reagent)
Hashish Oil	Marijuana/Hashish (Duquenois-Levine Reagent)
Heroin	Heroin Step 1 and Step 2
Cocaine Hydrochloride	Cocaine/Crack Step 1 and Step 2
Cocaine Base	Cocaine/Crack Step 1 and Step 2
3,4–Methylenedioxymethamphetamine (MDMA)	MDMA Step 1 and Step 2
Methamphetamine	Methamphetamine Step 1 and Step 2

COZART PLC
92 MILTON PARK
ABINGDON, OXFORDSHIRE ENGLAND OX14 4RY

Drug or Drug Type:	Manufacturer's Field Test:
Cocaine	Cocaine Solid Field Test

Lynn Peavey Company
10749 West 84th Terrace
Lexexa, KS 66214

QuickCheck

Drug or Drug Type:	Manufacturer's Field Test:
Marijuana	Marijuana – 10120
Marijuana	Marijuana – 10121
Hashish Oil	Marijuana – 10120
Hashish Oil	Marijuana – 10121
Heroin	Marquis – 10123
Heroin	Heroin - 10125
Cocaine Hydrochloride	Cocaine – 10124
Cocaine Base	Cocaine – 10124
Methamphetamine	Meth/Ecstasy – 10122
Methamphetamine	Marquis – 10123
MDMA	Meth/Ecstasy – 10122
MDMA	Marquis - 10123

STATE LOTTERY DEPARTMENT

Director's Orders

The following Director's Order of the State Lottery Department was filed with the Virginia Registrar of Regulations on October 6, 2011.

Director's Order Number Eighty-Nine (11)
Certain Virginia Instant Game Lotteries; End of Games.

In accordance with the authority granted by §§ 2.2-4002 B 15 and 58.1-4006 A of the Code of Virginia, I hereby give notice that the following Virginia Lottery instant games will officially end at midnight on October 7, 2011.

Game 1192	Triple Wild (TOP)
Game 1199	Jewel 7's (TOP)
Game 1211	Farm Fresh Fast $500!
Game 1220	$100,000 Riches (TOP)
Game 1231	Fantastic 5's Doubler (TOP)

This Director's Order becomes effective on the date of its signing and shall remain in full force and effect unless amended or rescinded by further Director's Order.

/s/ Paula I. Otto
Executive Director
October 6, 2011

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The following Director's Orders of the State Lottery Department were filed with the Virginia Registrar of Regulations on October 19, 2011. The orders may be viewed at the State Lottery Department, 900 East Main Street, Richmond, VA, or at the office of the Registrar of Regulations, 910 Capitol Street, 2nd Floor, Richmond, VA.

The last day for lottery retailers to return for credit unsold tickets from any of these games will be November 11, 2011. The last day to redeem winning tickets for any of these games will be April 4, 2012, 180 days from the declared official end of the game. Claims for winning tickets from any of these games will not be accepted after that date. Claims that are mailed and received in an envelope bearing a postmark of the United States Postal Service or another sovereign nation of April 4, 2012, or earlier, will be deemed to have been received on time. This notice amplifies and conforms to the duly adopted State Lottery Board regulations for the conduct of lottery games.

This order is available for inspection and copying during normal business hours at the Virginia Lottery headquarters, 900 East Main Street, Richmond, Virginia; and at any Virginia Lottery regional office. A copy may be requested by mail by writing to Director's Office, Virginia Lottery, 900 East Main Street, Richmond, Virginia 23219.

Director's Order Number Eighty-Eight (11)

Virginia Lottery's "New Year Bonus Sweepstakes" Final Rules for Game Operation (effective on October 19, 2011)

Director's Order Number Ninety (11)

Virginia's Instant Game Lottery 1289; "Crossword" Final Rules for Game Operation (effective on October 19, 2011)

Director's Order Number Ninety-One (11)

Virginia's Instant Game Lottery 1279; "Silver & Gold" Final Rules for Game Operation (effective on October 18, 2011)

Director's Order Number Ninety-Two (11)

Virginia's Instant Game Lottery 1280; "Sweet Treats" Final Rules for Game Operation (effective on October 19, 2011)

Director's Order Number Ninety-Five (11)

Virginia's Instant Game Lottery 1283; "Jingle Bens" Final Rules for Game Operation (effective on October 19, 2011)

Director's Order Number Ninety-Six (11)

Virginia's Instant Game Lottery 1264; "Diamond Dollars" Final Rules for Game Operation (effective on October 18, 2011)

BOARD FOR OPTICIANS

Notice of Periodic Review

Pursuant to Executive Order 14 (2010) and §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, the Board for Opticians is conducting a periodic review of 18VAC100-11, Public Participation Guidelines, and 18VAC100-20, Board for Opticians Regulations. The review of the regulations will be guided by the principles in Executive Order 14 (2010) and § 2.2-4007.1 of the Code of Virginia. The purpose of the review is to determine whether the regulations should be terminated, amended, or retained in their current form.

Public comment is sought on the review of any issue relating to the regulations, including whether the regulations (i) are necessary for the protection of public health, safety, and welfare or for the economical performance of important governmental functions; (ii) minimize the economic impact on small businesses in a manner consistent with the stated objectives of applicable law; and (iii) are clearly written and easily understandable.

The comment period begins November 7, 2011, and ends on November 28, 2011.

Comments may be submitted online to the Virginia Regulatory Town Hall at http://www.townhall.virginia.gov/L/Forums.cfm.
Comments may also be sent to William H. Ferguson, II, Executive Director, Board for Opticians, Department of Professional and Occupational Regulation, 9960 Mayland Drive, Suite 400, Richmond, Virginia 23233, telephone (804) 367-8590, FAX (804) 527-4295, or email opticians@dpor.virginia.gov. Comments must include the commenter's name and address (physical or email) information in order to receive a response to the comment from the agency.

Following the close of the public comment period, a report of the periodic review will be posted on the Town Hall and published in the Virginia Register of Regulations.

DEPARTMENT OF REHABILITATIVE SERVICES

Small Business Impact Analysis for 22VAC30-11, Public Participation Guidelines

Pursuant to §§ 2.2-4007.1 E and 2.2-4007.1 F of the Code of Virginia, the Department of Rehabilitative Services has conducted a review on 22VAC30-11, Public Participation Guidelines, to determine whether the regulation should be continued without change, amended, or repealed, consistent with the stated objectives of applicable law, to minimize the economic impact of regulations on small businesses. Public participation guidelines exist to promote public involvement in the development, amendment or repeal of an agency's regulations. Under § 2.2-4007.02 of the Code of Virginia, every rulemaking body in Virginia is required to adopt public participation guidelines and to use these guidelines in the development of its regulations. The regulation is consistent with the public participation guidelines required of all agencies. The regulation was last evaluated in October 2008, and it remains up to date with existing technology and economic conditions. This regulation should have no direct impact on small businesses. Therefore, it will be retained as is.

Contact Information: Vanessa S. Rakestraw, Policy Analyst, Department of Rehabilitative Services, 8004 Franklin Farms Drive, Richmond, VA 23229, telephone (804) 662-7612, FAX (804) 662-7663, TDD (800) 464-9950, or email vanessa.rakestraw@drs.virginia.gov.

Small Business Impact Analysis for 22VAC30-40, Protection of Participants in Human Research

Pursuant to §§ 2.2-4007.1 E and 2.2-4007.1 F of the Code of Virginia, the Department of Rehabilitative Services has conducted a review on 22VAC30-40, Protection of Participants in Human Research, to determine whether the regulation should be continued without change, amended, or repealed, consistent with the stated objectives of applicable law, to minimize the economic impact of regulations on small businesses. A public notice of this was review was issued, but no public comment was received by the department. This regulation provides a basis for the Department of Rehabilitative Services to oversee human subjects research involving the Department of Rehabilitative Services, the Woodrow Wilson Rehabilitation Center, sheltered workshops, and independent living centers. The regulation is needed to protect the health and welfare of humans who receive services from the stated entities and who also may become subjects in human research. Although federal regulations exist to provide these protections, this regulation

is required to ensure that oversight for these protections is provided at the state level. The regulation is written to ensure consistency with 45 CFR 46.101 et seq. The existing regulation was last reviewed in July 2009. Technology has resulted in existing research data being easily accessible by those who intend to conduct secondary data research. In addition, economic conditions make such data that can be acquired inexpensively more desirable to researchers. Research is typically conducted by those in academic, medical, or government settings. Small businesses do not usually engage in research using human subjects from the Department of Rehabilitative Services, the Woodrow Wilson Rehabilitation Center, sheltered workshops, and independent living centers. However, if a small business is interested in conducting such research, this regulation provides a protocol for the small business to follow. Thus, this regulations remains an important process in the protecting the welfare of human subjects.

Contact Information: Vanessa S. Rakestraw, Policy Analyst, Department of Rehabilitative Services, 8004 Franklin Farms Drive, Richmond, VA 23229, telephone (804) 662-7612, FAX (804) 662-7663, TDD (800) 464-9950.

STATE WATER CONTROL BOARD

Proposed Consent Order for Loudoun County Sanitation Authority

An enforcement action has been proposed for the Loudoun County Sanitation Authority for alleged violations in Loudoun County at the Courtland Rural Village Water Reclamation Facility. The proposed consent order describes a settlement of violations of Virginia Pollutant Abatement Permit No. VPA00010. A description of the proposed action is available at the Department of Environmental Quality office named below or online at www.deq.virginia.gov. Sarah Baker will accept comments by email at sarah.baker@deq.virginia.gov, FAX (703) 583-3821, or postal mail, Department of Environmental Quality, Northern Regional Office, 13901 Crown Court, Woodbridge, VA 22193, from November 7, 2011, through December 7, 2011.

Proposed Enforcement Action for Virginia Electric and Power Company d/b/a Dominion Virginia Power

An enforcement action has been proposed for Virginia Electric and Power Company d/b/a Dominion Virginia Power for alleged violations of the State Water Control Law concerning the unauthorized discharge of oil to state lands in York County. A description of the proposed action is available at the DEQ office named below or online at www.deq.virginia.gov. Paul R. Smith will accept comments by email at paul.smith@deq.virginia.gov, FAX (757) 518-2009, or postal mail Department of Environmental Quality, Tidewater Regional Office, 5636 Southern Blvd., Virginia Beach, VA 23462, from November 7, 2011, to December 7, 2011.

VIRGINIA CODE COMMISSION

Notice to State Agencies

Contact Information: *Mailing Address:* Virginia Code Commission, 910 Capitol Street, General Assembly Building, 2nd Floor, Richmond, VA 23219; *Telephone:* Voice (804) 786-3591; FAX (804) 692-0625; *Email:* varegs@dls.virginia.gov.

Meeting Notices: Section 2.2-3707 C of the Code of Virginia requires state agencies to post meeting notices on their websites and on the Commonwealth Calendar at http://www.virginia.gov/cmsportal3/cgi-bin/calendar.cgi.

Cumulative Table of Virginia Administrative Code Sections Adopted, Amended, or Repealed: A table listing regulation sections that have been amended, added, or repealed in the *Virginia Register of Regulations* since the regulations were originally published or last supplemented in the print version of the Virginia Administrative Code is available at http://register.dls.virginia.gov/cumultab.htm.

Filing Material for Publication in the Virginia Register of Regulations: Agencies are required to use the Regulation Information System (RIS) when filing regulations for publication in the *Virginia Register of Regulations*. The Registrar's office works closely with the Department of Planning and Budget (DPB) to coordinate the system with the Virginia Regulatory Town Hall. RIS and Town Hall complement and enhance one another by sharing pertinent regulatory information.