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Notice of Intended Regulatory Action (NOIRA)
Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) citation	Virginia Administrative Code cite: 9 VAC 25-260
Regulation title	Water Quality Standards
Action title	Triennial Review Rulemaking to adopt new, update or cancel existing water quality standards as required by § 62.1-44.15 of the Code of Virginia and the federal Clean Water Act.
Date this document prepared	June 24, 2013

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Orders 14 (2010) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual.*

Purpose

Please describe the subject matter and intent of the planned regulatory action. Also include a brief explanation of the need for and the goals of the new or amended regulation.

The subject matter of the rulemaking will include updated numerical and narrative criteria, use designations and other policies contained in the Water Quality Standards.

The intent of this rulemaking is to protect designated and beneficial uses of state waters by adopting regulations that are technically correct, necessary and reasonable. These standards will be used in setting Virginia Pollutant Discharge Elimination System Permit limits and for evaluating the waters of the Commonwealth for inclusion in the Clean Water Act 305(b) report and on the 303(d) list. Waters not meeting standards will require development of a Total Maximum Daily Load, effluent limitations, or further analysis of use removal under the Clean Water Act at 303(e) and Code of Virginia § 62.1-44.19:7.

This rulemaking is needed because the last triennial review was completed in February 2010 and new scientific information is available to update the water quality standards. Changes to the regulation are also needed to improve permitting, monitoring and assessment programs. In addition, the Department of Environmental Quality (Department) must fulfill the legal mandates for a three-year review under the Code of Virginia §62.1-44.15(3a) and federal regulations 40 CFR 131.

The goal is to provide the citizens of the Commonwealth with a technical regulation that is protective of water quality in surface waters, reflects recent scientific information, reflects agency procedures and is reasonable and practical.

Legal basis

Please identify the state and/or federal legal authority to promulgate this proposed regulation, including (1) the most relevant citations to the Code of Virginia or General Assembly chapter number(s), if applicable, and (2) promulgating entity, i.e., agency, board, or person. The identification should include (i) a reference to the agency/board/person's overall regulatory authority, as well as a specific provision authorizing the promulgating entity to regulate this specific subject or program; and a description of the extent to which the authority is mandatory or discretionary.

Federal and state mandates in the Clean Water Act at 303(c), 40 CFR 131 and the Code of Virginia in §62.1-44.15(3a) require that water quality standards be adopted, modified or cancelled every three years. These are the most relevant laws and regulations. The promulgating entity is the State Water Control Board (Board).

The Clean Water Act authorizes restoration and maintenance of the chemical, physical, and biological integrity of the Nation's waters. The Clean Water Act at 303(c) (1) requires that the states hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards.

The Federal regulations at 40 CFR 131 authorize requirements and procedures for developing, reviewing, revising and approving water quality standards by the States as authorized by section 303(c) of the Clean Water Act. 40 CFR 131 specifically requires the states to adopt criteria to protect designated uses.

The State Water Control Law authorizes protection and restoration of the quality of state waters, safeguarding the clean waters from pollution, prevention and reduction of pollution and promotion of water conservation. The State Water Control Law (Code of Virginia) at §62.1-44.15(3a) requires the Board to establish standards of quality and to modify, amend or cancel any such standards or policies. It also requires the Board to hold public hearings from time to time for the purpose of reviewing the water quality standards, and, as appropriate, adopting, modifying or canceling such standards.

The correlation between the proposed regulatory action and the legal authority identified above is that the amendments being considered are modifications of criteria that will protect designated uses and criteria and designated uses are requirements of the Water Quality Standards.

The authority to adopt standards as provided by the provisions in the previously referenced citations is mandated, although the specific standards to be adopted or modified are discretionary to the Environmental Protection Agency and the state.

Need

Please detail the specific reasons why the agency has determined that the proposed regulatory action is essential to protect the health, safety, or welfare of citizens. In addition, delineate any potential issues that may need to be addressed as the regulation is developed.

The rulemaking is essential to the protection of health, safety or welfare of the citizens of the Commonwealth. Proper water quality standards protect water quality and living resources of Virginia's waters for consumption of fish and shellfish, recreational uses and conservation in general.

Potential issues that may need to be addressed are listed in the alternatives sections. It should be noted that all sections of the regulation are open for comment during this mandated triennial review and a revision, addition or deletion could potentially occur in any section of the regulation. However, revisions under consideration to date have been listed in the substance and alternatives sections.

Substance

Please detail any changes that will be proposed. For new regulations, include a summary of the proposed regulatory action. Where provisions of an existing regulation are being amended, explain how the existing regulation will be changed.

The existing regulation may be proposed for amendment(s) to reflect new scientific information and to clarify the regulation. Changes may also be proposed to improve implementation of these standards in Virginia Pollutant Discharge Elimination System permits and in monitoring and assessments of surface waters. Some of the changes may be to numerical and narrative criteria, use designations, classifications, site specific or special standards, stream descriptions, antidegradation and implementation procedures such as mixing zones, variances and assessment procedures.

The following are issues under consideration but the Department staff will work in conjunction with other state and federal agencies and the public to include other amendments deemed necessary.

The Department has not accepted or rejected any of these issues as of yet. Some issues under consideration by the agency now include, but are not limited to, the following:

Water Quality Standards 9 VAC 25-250-5 et seq.

Modify, add or delete any section, criteria, use designation, standard, and policy to conform to EPA guidance, clarify state intent, implement state programs (e.g., permitting, monitoring and assessments), improve water quality or protect beneficial uses.

Criteria Issues 9VAC25-260-40:

1. Consider adding pH to the **** footnote to so that in thermally stratified lakes the criteria for dissolved oxygen <u>and</u> pH apply only to the epilimnion of stratified lakes.

Criteria Issues 9 VAC 25-260-140:

2. Significant new information has become available on the toxicity of cadmium to aquatic life. The Department will consider recalculating and revising the current criteria for cadmium in freshwater.

3. The U.S Environmental Protection Agency (EPA) recommends that the Virginia criteria for lead be adjusted using a “conversion factor” so that it is scientifically accurate to apply these criteria as “dissolved” lead measurements. This would result in a minor reduction of the criteria concentrations.

4. EPA has recently recommended a new criteria for copper in freshwater based on a “biotic ligand model” (BLM). This BLM model would adjust the criteria based on permit and receiving stream specific measurements of; temperature, pH, dissolved organic carbon, calcium, magnesium, sodium, potassium, sulfate, chloride and alkalinity. This copper BLM is intended to adjust the criteria to specific conditions in the receiving stream (not just hardness as is the case with the current copper criteria).

5. EPA has recently finalized their recommended national water quality criteria for the protection of aquatic life for acrolein and carbaryl. Virginia does not currently have water quality criteria to

protect aquatic life for either of these two pesticides, although for acrolein there are criteria to protect human health.

6. The Department typically updates water quality criteria designed to protect human health by revising these criteria to reflect any recent changes to the EPA-recommended toxicological values of either a reference dose or the cancer potency factor.

7. The current criterion for manganese is applicable only to waters designated as a public water supply and is based on a secondary maximum contaminant level (SMCL) for drinking water. SMCLs are non-enforceable federal guidelines intended to be applied to finished drinking water as supplied to the municipal water system customer. The SMCL for manganese is designed to prevent laundry staining when municipal treated drinking water is used for laundry washing. The Department has concluded that it is inappropriate to apply this guideline, which was originally intended for treated drinking water, to untreated, natural river water. The Department may recommend deleting this criteria.

Bacteria Criteria Issues 9 VAC 25-260-160 and 170:

8. The U.S Environmental Protection Agency has recently finalized their updated recommended national water quality criteria for bacteria designed for the protection of recreational uses (swimming) of waters. The revised EPA recommendations include a 30 day geometric mean (GM) value as well as a statistical threshold value (STV). The STV should not be exceeded by more than 10% of the samples taken. EPA's revised bacteria criteria include the following recommended values.

Water type : Indicator	**GM (cfu /100 ml)***	**STV (cfu /100 ml)***
Freshwater: *E. coli*	**126**	**410**
Saltwater: *Enterococci*	**35**	**130**

Note: * Colony Forming Units per 100 milliliters of water sample

Section 9 VAC 25-260-187: (Lakes nutrient criteria)

9. Two additional lakes may be added to list of lakes with nutrient criteria.

Two lakes in Powhatan County have been restored by the Virginia Department of Game and Inland Fisheries (DGIF). These dams were breached in 2004, repaired and refilled in 2008, and are again in use for recreational fishing as a warm water fishery.

River Basin Issues (9 VAC 25-260-360 through 540):

10. Add, modify or delete trout waters as appropriate.
11. Add, modify or delete public water supplies designations as appropriate.
12. Adjust temperature criteria or application of temperature criteria to streams stocked with trout by DGIF in the winter with the intent of supplying the public with seasonal trout fishing opportunities only in the winter but not in the summer.
13. Add Class VII (Swamp Water) designations as appropriate
14. Corrections to section descriptions in river basin tables for clarity and/or accuracy.

Miscellaneous Issues:

15. Provide definition of "wetlands" in 9 VAC 25-260-5.

Alternatives

Please describe all viable alternatives to the proposed regulatory action that have been or will be considered to meet the essential purpose of the action. Also, please describe the process by which the agency has considered or will consider other alternatives for achieving the need in the most cost-effective manner.

One alternative is to keep the current water quality standard regulation unchanged or to delay the triennial review. This was not chosen since the state is mandated to review the water quality standards regulation every three years and another review is due. Also, many issues have been identified by the Department's monitoring, assessments and permitting staff that need to be addressed. These issues are included in the 'Substance' section above. Each issue listed may have a more cost effective alternative or any individual issue may be accepted or rejected. The Department will solicit public input during the review and consider other alternatives and issues presented by the public which also meet the goals of the regulation and of the Department. It is also recognized that should a particular issue prove to be extremely complicated or sensitive the decision may be made to address that issue in a separate rulemaking.

Public participation

Please indicate the agency is seeking comments on the intended regulatory action, including ideas to assist the agency in the development of the proposal and the costs and benefits of the alternatives stated in this notice or other alternatives. Also, indicate whether a public hearing is to be held to receive comments on this notice.

The Board is seeking comments on the intended regulatory action, including but not limited to 1) ideas to assist in the development of a proposal, 2) the costs and benefits of the alternatives stated in this background document or other alternatives and 3) impacts of the regulation on farm and forest land preservation. The Board is also seeking information on impacts on small businesses as defined in § 2.2-4007.1 of the Code of Virginia. Information may include 1) projected reporting, recordkeeping and other administrative costs, 2) probable effect of the regulation on affected small businesses, and 3) description of less intrusive or costly alternative methods of achieving the purpose of the regulation.

A NOIRA public meeting will be held and notice of the meeting may be found on the Virginia Regulatory Town Hall website (**www.townhall.virginia.gov**). Both oral and written comments may be submitted at that time.

Anyone wishing to submit written comments may do so at the public meeting or by mail, email or fax to David C. Whitehurst, VA Department of Environmental Quality, P.O. Box 1105, Richmond, VA 23218; Phone: 804-698-4121; Fax: 804-698-4116; Email: David.Whitehurst@deq.virginia.gov.. Comments may also be submitted through the Public Forum feature of the Virginia Regulatory Town Hall web site at: www.townhall.virginia.gov. Written comments must include the name and address of the commenter. In order to be considered, comments must be received by 11:59 pm on the last day of the public comment period.

Public hearing at proposed stage

A public hearing will be held following the publication of the proposed stage of this regulatory action and notice of the hearing will be posted on the Virginia Regulatory Town Hall website (**http://www.townhall.virginia.gov**) and on the Commonwealth Calendar website (http://www.virginia.gov/connect/commonwealth-calendar). Both oral and written comments may be submitted at that time.

Regulatory panel

Please indicate, to the extent known, if advisers (e.g., regulatory advisory panel or negotiated rulemaking panel) will be involved in the development of the proposed regulation. Indicate that 1) the agency is not

using a panel in the development of the proposal; 2) the agency is using a panel in the development of the proposal; or 3) the agency is inviting comment on whether to use a panel to assist the agency in the development of a proposal.

The Board is using a panel to develop a proposal. Persons interested in assisting in the development of a proposal should notify the Department contact person by September 11, 2013 and provide their name, address, phone number, email address and the organization you represent (if any). The primary function of the panel is to develop recommended regulation amendments for Department consideration through the collaborative approach of regulatory negotiation and consensus. Multi-applications from a single company, organization, group or other entity count as one for purposes of making the decision specified in the preceding sentence. Notification of the composition of the panel will be sent to all applicants.

Family impact

Assess the potential impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

The direct impact resulting from the development of water quality standards is for the protection of public health and safety and the protection of water quality in surface waters which has only an indirect impact on families.

Acronyms and Definitions

Please define all acronyms used in the Agency Background Document. Also, please define any technical terms that are used in the document that are not also defined in the "Definition" section of the regulations.

Board	State Water Control Board
Department	Virginia Department of Environmental Quality
DGIF	Virginia Department of Game and Inland Fisheries
EPA	U.S. Environmental Protection Agency