



Virginia
Regulatory
Town Hall

Proposed Regulation Agency Background Document

Agency Name:	Department of Environmental Quality
VAC Chapter Number:	9 VAC 25-260-5 et seq.
Regulation Title:	Water Quality Standards
Action Title:	Amendments to the Water Quality Standards for the state and federally mandated triennial review.
Date:	07/19/02

This information is required pursuant to the Administrative Process Act (§ 9-6.14:9.1 *et seq.* of the *Code of Virginia*), Executive Order Twenty-Five (98), Executive Order Fifty-Eight (99), and the *Virginia Register Form, Style and Procedure Manual*. Please refer to these sources for more information and other materials required to be submitted in the regulatory review package.

Summary*

Please provide a brief summary of the proposed new regulation, proposed amendments to an existing regulation, or the regulation proposed to be repealed. There is no need to state each provision or amendment or restate the purpose and intent of the regulation; instead give a summary of the regulatory action and alert the reader to all substantive matters or changes. If applicable, generally describe the existing regulation.

Water Quality Standards consist of designated uses of the water body and narrative and numeric criteria that protect those uses by describing water quality in general terms and specifically as numerical limits for physical, chemical and biological characteristics of water.

The State Water Control Board is proposing amendments to the State's Water Quality Standards Regulation 9 VAC 25-260-5 *et seq.* The amendments include updates and revisions to water quality criteria, use designations, mixing zones and the antidegradation policy. Substantive changes include the addition of secondary contact bacteria criteria, the revision of approximately 30 existing numerical criteria and the addition of approximately 33 new numerical criteria and the placement of several waters in the Class VII "swamp waters" classification along with a new

pH criteria for those streams. The changes are based on EPA requirements and recommendations, the Department of Environmental Quality (DEQ) staff requests, and public comments.

Basis*

Please identify the state and/or federal source of legal authority to promulgate the regulation. The discussion of this statutory authority should: 1) describe its scope and the extent to which it is mandatory or discretionary; and 2) include a brief statement relating the content of the statutory authority to the specific regulation. In addition, where applicable, please describe the extent to which proposed changes exceed federal minimum requirements. Full citations of legal authority and, if available, web site addresses for locating the text of the cited authority must be provided. Please state that the Office of the Attorney General has certified that the agency has the statutory authority to promulgate the proposed regulation and that it comports with applicable state and/or federal law.

§ 62.1-44.15(3a) of the Code of Virginia, as amended, mandates and authorizes the Board to establish water quality standards and policies for any State waters consistent with the purpose and general policy of the State Water Control Law, and to modify, amend or cancel any such standards or policies established. The federal Clean Water Act at 303(c) mandates the State Water Control Board to review and, as appropriate, modify and adopt water quality standards. The corresponding federal water quality standards regulation at 40 CFR 131.6 describes the minimum requirements for water quality standards. The minimum requirements are use designations, water quality criteria to protect the designated uses and an antidegradation policy. All of the citations mentioned describe mandates for water quality standards.

Web Address sites where citations can be found:

Federal Regulation web site

<http://www.epa.gov/epahome/cfr40.htm>

Clean Water Act web site

<http://www4.law.cornell.edu/uscode/33/1313.html>

State Water Control Law (Code of Virginia) web site

<http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+62.1-44.2>

<http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+62.1-44.15>

The statutory authority is directly related to the regulation because the amendments proposed are modifications of existing criteria that will protect designated uses. Criteria and designated uses are requirements mandated under the citations listed above.

The proposed amendments do not exceed applicable federal minimum requirements. The groundwater standards, while not addressed by the Clean Water Act, however, are required by the State Water Control Law.

The Office of the Attorney General has certified that the agency has the statutory authority to promulgate the proposed regulation and it complies with applicable state and/or federal law.

Purpose*

Please provide a statement explaining the need for the new or amended regulation. This statement must include the rationale or justification of the proposed regulatory action and detail the specific reasons it is essential to protect the health, safety or welfare of citizens. A statement of a general nature is not acceptable, particular rationales must be explicitly discussed. Please include a discussion of the goals of the proposal and the problems the proposal is intended to solve.

Water Quality Standards establish the requirements for the protection of water quality and of beneficial uses of these waters. The justification for the proposed regulatory action is via the state's legal mandate for a three-year review of the Water Quality Standards under the Code of Virginia §62.1-44.15(3a) and federal regulation at 40 CFR 131. During this review the Board must adopt, modify or cancel standards as appropriate. This rulemaking is needed because the last triennial review was completed in December 1997 and new scientific information is available to update the water quality standards. In addition, the Environmental Protection Agency (EPA) disapproved several sections of the regulation, which must be addressed as soon as possible by the state or EPA will promulgate the amendments. Changes to the regulation are also needed to better reflect existing permitting practices and update use designations as well as to address EPA's new recommendations for this triennium.

This provision of the regulation is justified from the standpoint of the public's health, safety or welfare in that it allows for the protection of designated uses of the water bodies. Proper criteria protect water quality and living resources of Virginia's waters for consumption of fish and shellfish, recreational uses and conservation in general.

Substance*

Please identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. Please note that a more detailed discussion is required under the statement providing detail of the regulatory action's changes.

The amendments will add new definitions, modify the mixing zone and antidegradation policies, update the Table of Parameters with new and revised criteria and a reformatted table, state that the taste and odor criteria apply at the drinking water intake, move the groundwater standards to a new regulation, delete and modify special standards, add a site specific criterion for copper in Hampton Roads, update use designations for trout streams and public water supplies, identify Class VII swamp waters in the Chowan basin and rearrange the Middle and Lower James river basin tables.

Issues*

Please provide a statement identifying the issues associated with the proposed regulatory action. The term "issues" means: 1) the primary advantages and disadvantages to the public, such as individual

private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, please include a sentence to that effect.

The primary advantage to the public is that the updated numerical criteria are based on better scientific information to protect water quality. Another advantage to the public is that the numerical criteria now include all 307(a) pollutants for which 304(a) criteria have been published. This will ensure future protection of state waters if a new pollutant is found or a new industry is introduced. The updated saltwater copper criterion may be viewed as less stringent than the existing criteria; however, the scientific data base supporting that criterion is better than the one supporting the existing criteria and more accurately portrays the toxicity of copper in Virginia's marine and estuarine waters. The disadvantage is that the public may see this as an attempt to "lower the bar" on water quality. The goal is to set realistic, protective goals in water quality management and to maintain the most scientifically defensible criteria in the water quality standards regulation. EPA has also reviewed the copper saltwater and site-specific criteria and has indicated these are "approvable" under the Clean Water Act.

A potential disadvantage to the public may occur in the implementation of the new mixing zone sizing requirements for tidal waters. These new requirements may cause more stringent permit limits for some discharges. These expenses are outlined under "Fiscal Impacts."

The advantage to the agency or the Commonwealth that will result from the adoption of these amendments will be more accurate and scientifically defensible permit limits. This is the direct result of the adoption of new and updated criteria and defensible mixing zone requirements for tidal waters. Another advantage is the adoption of a set of Class VII "swamp waters" with corresponding lower pH criteria. The adoption of these waters will ensure that water quality assessments are accurate for these waters and these waters will not be inappropriately placed on the 303(d) impaired waters list for these naturally low pH waters.

There is no disadvantage to the agency or the Commonwealth that will result from the adoption of these amendments.

Locality Particularly Affected*

Please identify any locality particularly affected by the proposed regulation. Locality particularly affected means any locality which bears any identified disproportionate material impact which would not be experienced by other localities.

Counties

Alleghany, Augusta, Bath, Charles City, Culpeper, Fauquier, Giles, Halifax, Hanover, Henrico, Highland, Loudoun, Nelson, New Kent, Pittsylvania, Prince William, Powhatan, Rappahannock, Rockbridge, Rockingham, Shenandoah, Spotsylvania, Stafford

Towns

Round Hill, Front Royal, Culpeper, Madison, Halifax, Monterey, Elkton, Edinburg

Cities

Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, Richmond, Covington

Public Participation*

Please include a statement that in addition to any other comments on the proposal, the agency is seeking comments on the costs and benefits of the proposal.

In addition to any other comments, the Board is seeking comments on the costs and benefits of the proposal, the impacts of the regulation and the impacts of the proposal on farm lands and farm land preservation.

The Board also seeks comment on whether the antidegradation policy should be amended as EPA has required, including whether this change may be interpreted to mean that the Board must control nonpoint sources when the Board has no authority in statute to control nonpoint source pollution. The antidegradation policy has been disapproved by EPA and the state risks federal promulgation of the amendments if these changes are not made.

Related to the antidegradation policy is the implementation of tier one (waters at or below the standards) and tier two (higher quality) waters. Currently, the agency designates tier two waters using a *holistic* or *water body* approach. This means that the exceedance of one water quality criteria places a water body into the tier one category and each parameter is regulated at the level set by the water quality criteria. The Board seeks comment on whether this implementation process should be done on a *parameter by parameter* approach. This means that each parameter is regulated individually; either at the level set by the water quality criteria or at the higher quality background level.

Comment is sought as to whether it is necessary to state in the mixing zone policy that no mixing zones shall be approved that violate the endangered species acts (state and federal). The Board is concerned that this statement may be interpreted to mean that additional prohibitions or controls beyond what is already implemented may be required. The Board is also concerned and seeks comment on whether this amendment expands the authority of the Board from what is required by the Clean Water Act.

The Board requests comments on the appropriateness of applying the accepted five mile upstream protection zone to those public water supply designations that do not currently follow the accepted five mile upstream protection zone. The VA Department of Health has stated that they consider it acceptable to measure the five mile distance as stream miles from the intake as the starting point of a water supply designation whether main stem or tributaries. The VA Department of Health does not interpret any designation that contains the words "and it's tributaries" to include the tributaries to their headwaters if such distance exceeds five miles from the intake.

The Board requests comments on whether Class C, possible human carcinogen criteria should be calculated using a reference dose, or an oral slope factor with a risk level. EPA has

recommended the Commonwealth to use the oral slope factor and risk level; this results in a more stringent criterion. The VA Department of Health has stated these decisions should be approached on a case by case basis.

The Board requests comments on whether the acute averaging periods for metals and organics should be different than fast acting, non-persistent pollutants such as ammonia (24 hr., 96 hr. and 1-hour averaging periods respectively). EPA has published cadmium as a 24-hr average and the Board has proposed it as such.

The Board requests comments on the secondary contact recreational use criteria. Under what circumstances should waters be designated as secondary? Also, what information should be collected in the use attainability study (a use attainability study contains the information which supports the use change from primary to secondary)? For example, the Board believes waters naturally contaminated by wildlife would be good candidates for secondary contact designations and bacterial source tracking could be used to support this change.

Anyone wishing to submit written comments for the public comment file may do so at the public hearing or by mail to Eleanore Daub, Department of Environmental Quality, P.O. Box 10009, Richmond, VA 23240, (804) 698-4111, by fax to (804) 698-4522 or email emdaub@deq.state.va.us. Written comments must include the name and address of the commenter. In order to be considered, comments must be received by the close of the comment period.

A public hearing will be held and notice of the public hearing can be found in the Calendar of Events section of the Virginia Register of Regulations.

The Board will hold a formal hearing at a time and place to be established, if a petition for such a hearing is received and granted. Affected persons may petition for a formal hearing concerning any issue of fact directly relevant to the legal validity of the proposed action. Petitions must meet the requirements of § 1.23(b) of the Board's Procedural Rule No. 1 (1980), and must be received by the contact person by (date).

Fiscal Impact

Please identify the anticipated fiscal impacts and at a minimum include: (a) the projected cost to the state to implement and enforce the proposed regulation, including (i) fund source / fund detail, (ii) budget activity with a cross-reference to program and subprogram, and (iii) a delineation of one-time versus on-going expenditures; (b) the projected cost of the regulation on localities; (c) a description of the individuals, businesses or other entities that are likely to be affected by the regulation; (d) the agency's best estimate of the number of such entities that will be affected; (e) the projected cost of the regulation for affected individuals, businesses, or other entities; and (f) an estimate of the impact of the proposed regulation upon small businesses as defined in § 9-199 of the Code of Virginia or organizations in Virginia.

The projected cost to implement and enforce the regulation should not cause any additional financial impact to the state. These regulations are generally updates of existing rules and while

the staff may have to change the way permit limits and water quality assessments are conducted, it will not take additional staff or resources to do this. These programs are funded by EPA 106 grants.

There is expected to be some financial impact to permitted discharges to saltwater because of the new mixing zone requirements. These impacts will be seen primarily to large discharges into small tidal creeks. These permittees may see a reduction in available dilution because of the new sizing requirements in saltwater. Currently, permit limits are calculated using a dilution ratio of 50:1 to determine chronic limits into all tidal waters and this level of dilution is not available in smaller tidal creeks. The new language is more representative of actual stream conditions and therefore, more protective. Any permittee that is faced with less dilution still has the option to do a mixing study, which could be anything from a desk top computer model to a dye study which can be used (if appropriate) to waive these sizing requirements. These mixing studies may range from \$5,000 to \$25,000 depending upon the complexity of the study. There are currently 104 individual permits to tidal waters (figure excludes General Permits). It is estimated that 77 of these permits may fall under these new mixing requirements. It is also estimated that the primary impact from the reduced dilution will be in the form of ammonia limits for sewage discharges that are large in volume compared to the receiving stream, which may be a small tidal creek. The cost of nitrification can range from \$220,000 for a package type nitrification system to \$5,500,000 for nitrification/denitrification capital costs. These costs are a one-time expenditure; however, operations and maintenance costs would be an ongoing cost. Operations and maintenance for nitrification/denitrification could be \$23,000 for a 0.10-MGD plant to \$195,000 for a 0.60-MGD plant. It is estimated that approximately 30 permittees may be faced with ammonia limits due to the new mixing requirements.

Another new proposed requirement for tidal waters is the installation of a subsurface diffuser for freshwater effluents to saltwater in order to obtain reliable mixing. This new requirement only applies to new or expanded discharges greater than 0.5 MGD, so existing discharges are not affected. There are approximately 40 existing discharges that fall into this category. If these dischargers elect to increase their flow, they would be required to install a subsurface diffuser.

Another change in the mixing zone policy is the requirement that the Board not approve a mixing zone that violates the federal Endangered Species Act of 1973 (16 USCA §§ 1531-1543) or the Virginia Endangered Species Act (Title 29.1 §§ 563-568). The intent of this new language is not to add new prohibitions or requirements but to recognize the existence of federal and state laws that control what DEQ must consider when we allow mixing zones in addition to the Clean Water Act.

It is not expected that the revisions and additions to the Table of Parameters will cause financial impact. The additions of approximately 33 new criteria and revisions of 30 existing criteria (both human health and aquatic life) are not expected to have significant impacts on most of the regulated community. Most of the human health parameters were not found in a search of compounds used in Virginia during the last triennial review, so any impacts would primarily be upon new industrial sources that may locate in the Commonwealth. The proposed aquatic life criteria for metals are more stringent (except for copper in saltwater) than existing criteria but for most metals, the reductions are small and permittees with metals in their discharges would already be impacted by the existing aquatic life criteria. A survey of industrial and municipal

permit limits indicates that most of the impacts on permit limits for metals are for chromium, copper, lead and zinc. The saltwater criteria for copper is proposed as a less stringent number, so this should not impact permittees in those areas. Lead is not proposed to be changed from the existing and zinc changes are very small. However, permit limits for copper (in freshwater) and chromium (in all waters) may impact some permittees.

Detail of Changes

Please detail any changes, other than strictly editorial changes, that are being proposed. Please detail new substantive provisions, all substantive changes to existing sections, or both where appropriate. This statement should provide a section-by-section description - or cross-walk - of changes implemented by the proposed regulatory action. Where applicable, include citations to the specific sections of an existing regulation being amended and explain the consequences of the proposed changes.

In 9 VAC 25-260-5 definitions are proposed for "drifting organisms", "mixing zones", "passing organisms", "secondary contact recreation" and "swamp waters." These definitions are intended to clarify the intent of the regulation and assist in implementation.

In 9 VAC 25-260-20, the general criteria is revised to recognize that mixing zones established accordingly, do not violate the general criteria. This is necessary to allow mixing zones and does not change existing implementation procedures. In the same section, subdivision B, the mixing zone provisions have been revised to recognize that mixing zones are used in evaluation of permit limitations for all types of criteria. Also, mixing zone sizing requirements are being added for saltwater discharges. This will result in re-evaluations of mixing zones for all tidal discharges where mixing zones have not been defined. The financial impact of this change is discussed in "Fiscal Impact" above. Mixing zones are not allowed for effluents to wetlands, swamps, marshes, lakes or ponds. The Board via guidance has already implemented this prohibition. In addition, a statement has been added that no mixing zones shall be approved that violate the federal and state Endangered Species Acts. This is a recognition of existing mandates and is not expected to change the way permits have been implemented.

In 9 VAC 25-260-30, language that restricts the implementation of the antidegradation policy to Board regulated activities has been removed. This is an EPA required change. These amendments to the antidegradation policy are not expected to have impacts on current permitting procedures. However, the interpretation of these changes has raised questions about the effect on non-point source activities that are not under the jurisdiction of the Board. The Board does not believe this change increases any regulatory authority under the Clean Water Act, but is asking EPA and the public to provide comment as to whether this change is appropriate.

In 9 VAC 25-260-50, Class VII waters have been recognized as "swamp waters" and appropriate pH criteria have been added to this table. This change will provide for a more accurate water quality assessment of these waters that are naturally low in pH. The proposal stipulates that permit limits will continue to be regulated under existing pH levels. A group of these waters has been listed in the River Basin Section Tables 9 VAC 25-260-470.

In 9 VAC 25-260-140, the existing Table of Parameters is deleted and replaced with a reformatted table. This new table contains revisions of approximately 30 existing criteria and the

addition of approximately 33 new criteria. The reformatted table contains information directly under the parameter names that once was formerly provided by footnotes. The reformatted table also contains chemical abstracts service (CAS) numbers and is expected to aid in readability of the table for the general public. The taste and odor criteria in the Table of Parameters now state that they apply at the drinking water intake. Previously, they applied throughout the entire public water supply. Subdivision E of this section also states that variances are granted to conditions that limit attainment of designated uses, rather than conditions that limits attainment of water quality criteria. This is a correction of the language and is not expected to change implementation of the section.

In 9 VAC 25-260-150, the dioxin surface water quality standard is deleted and is moved to the Table of Parameters in 9 VAC 25-260-140.

In 9 VAC 25-260-170, the fecal coliform bacteria criteria have been modified to add new criteria for secondary contact recreational waters. All waters currently are designated for primary and secondary recreation, yet no criteria have been established for secondary because no waters have ever been designated for only secondary contact recreation. It is believed that secondary contact waters do exist in the state and in order to make this designation, criteria are needed to protect for secondary.

In 9 VAC 25-260-190 - 240, the groundwater criteria, standards and antidegradation policy are proposed for deletion and moved to a new VAC number 9 VAC 25-280-10 *et seq.* The new VAC number is necessary because the groundwater standards are not Clean Water Act mandated and therefore, have a different effective date from the surface water standards.

In 9 VAC 25-260-310, special standard "d" is cancelled because it has been replaced by other regulations. Special standard "m" is modified to clarify the intent of the application of the special standard. Special standard "q" is deleted since its effective date hinges on Congressional authorization for construction of a dam on the Rappahannock River and this authorization has never been granted. Special standard "z" is a new standard which reflects a site specific study in the Hampton Roads harbor and Elizabeth River.

In 9 VAC 25-260-320, the Roanoke Scenic River designation has been modified to reflect the existing statute wording. These designations are placed in this regulation for informational purposes only.

In 9 VAC 25-260-380, this section has been revised to reflect what is written in 9 VAC 25-260-140, which is that the taste and odor criteria apply at the drinking water intake (see 9 VAC 25-260-140 above).

In 9 VAC 25-260-390 - 540, these sections have all been updated to reflect new and revised public water supplies, natural and stockable trout streams. Sections 9 VAC 25-260-410 and 420 have been revised so that all waters below the fall line are in section 410. The Chowan Basin has been updated to include Class VII waters (see 9 VAC 25-260-50 above).

In 9 VAC 25-280-10 *et seq.* A new regulation is included as part of this rulemaking which contains the existing groundwater standards, criteria and antidegradation policy as well as pertinent definitions, general requirements, requirements for modification, amendment, and cancellation of standards and designations of authority.

Alternatives

Please describe the specific alternatives to the proposal considered and the rationale used by the agency to select the least burdensome or intrusive alternative that meets the essential purpose of the action.

The Board considered specific alternatives in this proposal. They are described below.

The State Water Control Board considered whether the antidegradation policy should be amended as EPA has required or whether this change might be misinterpreted to mean that the Board must control nonpoint sources when the Board has no authority in the statute to control nonpoint source pollution. EPA required the Board to amend the policy so that it applies to all activities, not just those under the jurisdiction of the Board. The Board decided to approve public hearings on the proposal with the EPA required changes; however, the Board seeks public comment on this issue. The Board also decided to write a letter to the Virginia Congressional delegation and EPA expressing their concern of EPA requiring the state to amend the regulation so that it might expand the authority of the Board when the Clean Water Act does not require this authority.

The State Water Control Board considered whether it is necessary to state in the mixing zone policy that no mixing zones shall be approved that violate the endangered species acts (state and federal). The Board is seeking comment on this issue also since they are concerned that this statement may be interpreted to mean that additional prohibitions or controls beyond what is already implemented may be required. Similarly to their concerns with the antidegradation policy amendments, the Board is also concerned that EPA may be expanding the authority of the Board with the addition of this language.

Additionally, in the mixing zone section, the Board considered whether the sizing requirements for saltwater discharges should reflect existing permitting guidance or alternatively, to reflect site specific conditions. The Board chose the alternative since this approach considered actual stream conditions. The Board believes this is a more technically defensible approach to regulating mixing in saltwater.

The Board amended all public water supply designations that contained tributaries and an upstream five-mile protection zone to clarify that the five-mile protection zone did not include the tributaries to their headwaters. This was done with the approval of the VA Health Department. As an alternative, the Board considered including this five-mile protection zone in all public water supply designations. The Board is asking for comment on this issue and may pursue the alternative, depending on public comment.

The Board has calculated all Class C, possible human carcinogen criteria using an oral slope factor and a risk factor (10^{-5}) rather than just a reference dose. A reference dose is used to calculate human health criteria for non-carcinogens and usually results in less stringent criteria. As an alternative, the Board considered using the reference dose since this would be consistent with the calculations used during the 1997 triennial review. EPA recommends the more stringent approach and the VA Health Department recommends a case by case approach for each parameter. The Board may pursue the alternative depending upon public comment.

The Board considered using a longer acute averaging period for metals and organic aquatic life criteria. These criteria are currently one-hour acute averages. EPA has published cadmium as a 24-hour average and the Board has incorporated this average into the proposal. However, EPA has also stated that acute criteria for other metals and organics may also have alternative averaging periods but has not published these in other criteria documents. The Board has requested comments on the alternatives of 24-hour and 96-hour vs. the existing one-hour averaging period.

Public Comment

Please summarize all public comment received during the NOIRA comment period and provide the agency response.

The comment period for this Notice of Intended Regulatory Action ended on June 22, 2001. Below is a summary of public comments received during that comment period.

Issue - Definitions	Organization
Comment: Should not be added until EPA finalizes new regulatory changes.	VMA, VAMWA
Definitions should remain. Mixing zones, acute lethality, passing and drifting organisms, toxic substances, designated uses, and existing uses should be clearly defined. "Beneficial use" is a subjective term and should be removed from the regulation.	USFWS
The definition of "natural" should define the term as "not artificial or manmade." No permanent manmade alternations should be considered as natural. 4-day average as "discrete, running or arithmetic mean, etc..." also need to be defined. Support the reinstatement of beneficial uses.	WildLaw
Supports adding relevant definitions.	DCR

Issue - Biological Criteria	Organization
<p>Comments: Should not be added unless DEQ is moving away from the "independent applicability" approach. If biological criteria are added, a technical advisory committee should be formed.</p> <p>Support improving the narrative biological criteria to increase protection of aquatic resources.</p> <p>Support biological criteria as part of the General Criteria. Biota are better assessment tools. Using aquatic life as endpoints would help establish targets for total maximum daily load development. Supports use of biomonitoring in assessments.</p> <p>Do not support unless DEQ will commit to site-specific criteria basing them on geomorphological conditions, reviewing Ohio's biological criteria, and including urban streams biological criteria.</p> <p>Supports additional biological criteria to clarify the Board's authority to protect these uses. Language in previous versions of the standards would suffice (i.e. "All state waters shall be maintained..... and will support the propagation and growth of all aquatic life...).</p>	<p>VMA</p> <p>JRA</p> <p>DCR</p> <p>VAMWA</p> <p>CBF</p>
<p>Issue - Narrative Criteria</p>	
<p>Comments: Biological, whole effluent or any general narrative criteria must include legally adopted translators in order to convert to quantifiable values. Narrative general criteria should not apply at all flows and/or inside mixing zones. Doing so would reverse longstanding policies and result in exorbitant costs that would not be justified by any de minimis improved environmental protection. Provided a legal discussion on the limitations on the use of narrative criteria in a regulatory context.</p> <p>Narrative criteria should apply at the same flows as numeric criteria and should not apply inside the allocated impact zone.</p> <p>Narrative criteria should apply at all flows, including the mixing zone. Permits to low flow streams that violate narrative criteria should be denied.</p> <p>General criteria should apply to all flows (mixing zones, low flows, etc.) that are capable of supporting aquatic life.</p> <p>See comments under WET criteria below.</p>	<p>VMA</p> <p>Navy</p> <p>SELC, CBF</p> <p>DCR</p> <p>VAMWA</p>

<p>Issue - Whole Effluent Toxicity (WET) Comments: WET criteria should be numeric if DEQ continues to rely on them as regulatory tools.</p> <p>Supports the adoption of WET criteria. This is necessary for discharges where regulation of individual pollutants is ineffective to prevent toxicity.</p> <p>Numeric WET criteria should not be added. Narrative criteria allow more flexibility to use different translation mechanisms for site-specific situations.</p> <p>WET criteria should not replace narrative acute and chronic toxicity criteria. Any clarifications to WET should occur within the VPDES permitting regulations.</p> <p>Supports WET criteria (narrative or numerical) but not in place of narrative acute and chronic toxicity criteria.</p> <p>Do not adopt WET criteria since controversial now at national level. Instead retain general criteria pertaining to toxic substances, delete acute and chronic toxicity narrative criteria and implement this program via guidance.</p>	<p>Organization</p> <p>VMA</p> <p>WildLaw</p> <p>Navy</p> <p>SELC, CBF</p> <p>DCR</p> <p>VAMWA</p>
<p>Issue - Temperature Comments: Natural temperature definition should remain (not due to anthropogenic sources)</p> <p>Supports language to clarify applicability of temperature criteria.</p> <p>Supports clarifying temperature criteria to apply outside of mixing zones.</p>	<p>USFWS, DCR, CBF</p> <p>DCR</p> <p>VAMWA</p>
<p>Issue -Halogen Ban Comments: Too extreme since numeric criteria are equally effective. Do not expand to other areas.</p> <p>Ban should remain.</p> <p>Removal would require formal consultation between USFWS and EPA pursuant to section 7 of the Endangered Species Act. The ban should be expanded to all locations where federally listed species occur.</p> <p>Other alternatives to chlorine should be explored. A dechlorination requirement should be protective of natural heritage resources.</p>	<p>VMA</p> <p>SELC, USFWS, JRA, DCR, CBF</p> <p>USFWS</p> <p>DCR</p>

Issue - Antidegradation	Organization
<p>Comments: The antidegradation policy should not be changed unless DEQ will clarify that discharges are authorized that improve overall water quality of the water body, even if water quality standards are not met. The Tier 2 policy does not need to be changed to apply to "existing" rather than "increased" discharges to be consistent with EPA. A change from "increased" to "existing" may be misinterpreted to require existing permitted discharges to Tier 2 requirements which was not the approach taken by EPA in the Great Lakes System. This existing effluent quality approach was criticized as a disincentive to good performance.</p>	<p>VMA, Dominion</p>
<p>Minor changes in numeric indicators should be permitted as long as stream uses are maintained. No waters should be listed as "exceptional" as long as the designation cannot be removed without EPA permission.</p>	<p>Zicht</p>
<p>Move forward with EPA recommendations. All activities (not just permitting) that effect water quality are bound by the antidegradation policy.</p>	<p>USFWS</p>
<p>Leave the word "instream" because offstream uses such as farming or water withdrawl are not intended to be protected by this policy. However, offstream use by for amphibians and birds should be protected</p>	<p>USFWS and SELC</p>
<p>Antidegradation policy must apply to all activities, including instream and off-stream uses, and address water quality impacts from nonpoint sources, as well as point sources.</p>	<p>JRA, CBF</p>
<p>Clarify Board's authority to protect Tier 2 waters even for projects for which they have no jurisdiction. (non-point). All EPA's issues related to antidegradation and exceptional waters must be addressed.</p>	<p>CBF</p>
<p>The phrase "as a minimum" covers the staff's concern about inserting the words "at least" in front of the phrase: "the level of water quality"" in the Tier 1 language. Staff intent is not clear with this suggested change. Removing the word "instream" would weaken the regulation and make the first and second parts of the sentence redundant. "Instream" uses are protected via the first part of the sentence and [all] existing uses in the second half. Inserting the word [all] would clarify.</p>	<p>WildLaw</p>
<p>Agrees with EPA's recommended changes to the antidegradation policy. Tier 1 protection should be extended to all waters and not just "board-regulated." The highest statutory and regulatory requirements for Tier 2 waters should be extended to include existing Tier 2 waters. Also, VA should consider less degrading alternatives before granting an exception to Tier 2 protection. There are many more Tier 3 waters that should be recognized in the regulation. Regulations should recognize that non-point sources contribute to stream degradation and a requirement for a Memorandum of Understanding with DCR to protect existing water quality should be included.</p>	<p>SELC</p>

Issue - Antidegradation continued...	Organization
<p>Comments: The exceptional waters policy should more clearly define the benefits to riparian property owners and local governments. Many streams are deserving of this designation.</p> <p>Supports clarifications of the antidegradation policy with language changes and definitions of tiers 1,2 and 3 with establishment of permit requirements for each designation.</p> <p>Do not make revisions to the policy during this triennial review.</p>	<p>JRA</p> <p>DCR</p> <p>VAMWA</p>
<p>Issue - Mixing Zones</p>	
<p>Comments: The mixing zone standard currently is aligned with EPA guidance and the only changes that should be made are to allow for DEQ staff to provide demonstrations to waive mixing zone requirements and that general criteria should not be applied in mixing zones. Any further restrictions, such as with bioaccumulative substances are not appropriate since the effect of these substances is very site-specific.</p> <p>Bioaccumulative and sediment loading substances are being addressed at the national level and via the Chesapeake Bay program, therefore, premature to do so at this time.</p> <p>Mixing zones may result in unauthorized take of federally listed aquatic species or permanent modification of designated critical habitat and therefore, can not be allowed.</p> <p>General criteria and use designations apply to mixing zones.</p> <p>The burden to seek waivers on mixing zone requirements should remain on the permittee, not DEQ staff. Eliminate mixing zones for persistent bioaccumulative pollutants.</p> <p>Prohibition in mixing zone must comply with the goal to the EPA/States <i>Chesapeake Bay Toxics 2000 Strategy</i> that provides for the elimination of mixing zones for bioaccumulative and persistent substances. Must address EPA's issue about mixing zone applicability in waters with "special needs."</p> <p>Include mixing zones standards and should not apply to bioaccumulative or sediment loading concern substances.</p>	<p>VMA, Dominion, VAMWA</p> <p>VAMWA</p> <p>USFWS, SELC, JRA</p> <p>SELC, CBF</p> <p>WildLaw, SELC, JRA, CBF</p> <p>CBF</p> <p>DCR</p>

Issue - Mixing Zones, continued...	Organization
<p>Comments:</p> <p>The statistical nature of the standards and the limitations of actual mixing processes should be recognized by following up with in stream monitoring including sediment sampling. Tidal mixing allowances should also be documented with empirical evidence. Subdivision 20.B.4.b of the mixing zone policy does not need to be amended to allow the staff to provide demonstrations for the waiver of the mixing zone requirements. Subpart a already allows this but when is it in the public interest for DEQ to perform the in stream survey? Subdivision 20.B.7 should be deleted. General criteria "except in mixing zones" should be added back in since every permit with a mixing zone violates this regulation.</p>	<p>WildLaw</p>
<p>Issue - Wet Weather</p> <p>Comments:</p> <p>Not at this time, wait for EPA to overcome challenges associated with this issue.</p> <p>Opposed since such wet weather criteria would encourage dumping of pollutants during rain events. Dilution should not be considered to permit increased discharges of accumulative pollutants.</p> <p>Strongly opposed since would reduce protection from combined and sanitary sewer overflows and stormwater. Would particularly effect beneficial uses (such as kayaking) of the James because of Richmond and Lynchburg.</p> <p>Long term control plan (LTCP) for each combined sewer overflow (CSO) in Richmond was implemented in 1992 and predates EPA's CSO Control Policy. Richmond moved ahead in advance of national focus with capital costs estimated at \$460 million. EPA acknowledges that states may change or suspend designated uses during CSO events or seasonally and a few states have done so. EPA provides guidance documents on integrating standards changes with affordable CSO control benefits. DEQ should adopt the wet weather controls presented in EPA's <i>Draft Guidance on Implementation the Water Quality-Based Provisions in the CSO Control Policy</i>.</p> <p>Include wet weather standards.</p> <p>Strongly supports since current standards are inappropriate under wet conditions. Experiences with fecal coliform TMDLs support this alternative. Consider EPA's draft guidance (see above).</p>	<p>VMA, Dominion, SELC, CBF</p> <p>WildLaw</p> <p>JRA</p> <p>Richmond</p> <p>DCR</p> <p>VAMWA</p>

Issue - Wetlands	Organization
Comments:	
<p>DEQ should defer to the federal wetlands delineation manual and definitions. The regulation of wetlands, including wetland uses and criteria, is a highly complex matter and should not be regulated by the water quality standards but rather as a separate regulatory initiative.</p>	VMA
<p>Wetlands can absorb and treat large volumes of organic pollutants and should not be declared as protected from that same type of pollution.</p>	Zicht
<p>List the specific uses to be protected.</p>	Robinette
<p>Assigning a use such as "storage or filtration of sediments, nutrients and other pollutants" should not describe wetlands since 40 CFR 131 states that "In no case shall a state adopt waste transport or assimilation as a designated use for any waters of the United States." In doing this, the state must ensure the pollutants arise from non-anthropogenic sources. Otherwise, the DEQ should adopt narrative criteria and uses at this time.</p>	USFWS
<p>Reference to delineation should mirror the requirements of Va's Nontidal Wetlands Law and the Clean Water Act. The standards should include wetlands as waters of the state, see 15A NCAS 02B.02331 of North Carolina rules for guidance. Three classes of wetlands are appropriate, generic nontidal, saltwater or tidal and unique wetlands that are to be protected. Each class had designated uses to be protected. This would then set the standard for permitting of wetlands and be consistent with the laws stated above.</p>	SELC
<p>Wetlands are considered part of state waters, however wetlands uses and criteria may be handled best by a separate advisory committee since the new wetlands regulations need to be part of the discussion.</p>	JRA
<p>The VA Wetlands Restoration Coordination committee could assist in determining alternate criteria. Wetland types, delineation procedures and criteria dependent on wetland type and function should be included.</p>	DCR
<p>Do not specifically list in regulation but reference via an acceptable scientific source. Wetland uses and criteria are complicated by non-tidal wetland regulations. A separate advisory committee should address wetland delineation and criteria.</p>	CBF

Issue - Numeric Criteria (Aquatic Life)	Organization
<p>Comments: The selenium and ammonia criteria should be updated based on new data (provide information and data on new criteria). The existing acute selenium criteria should not be used as the U.S. Court of Appeals for the D.C. Circuit struck down the acute criterion for selenium that EPA included in the Great Lakes Water Quality Guidance. The duration, frequency and recurrence intervals applied to the aquatic life criteria should be updated and a technical advisory committee should be formed to provide support. There is no compelling evidence to revise the dioxin criteria.</p>	<p>VMA, Dominion</p>
<p>There is naturally occurring copper in several creeks (e.g. Goose and Tuscarora Creeks in Loudoun County) and these should not be listed as impaired.</p>	<p>Zicht</p>
<p>The duration for acute criteria should reflect new EPA research that shows that short duration toxicity is dependent on the individual toxicant.</p>	<p>Navy</p>
<p>If the lead criteria are to be updated using the Hall data, this data must be disclosed and the public given an opportunity to review and comment before suggestion is acted upon. The suggestion to establish criteria for BTEX that "match" permit limits is curious. Permit limits must protect water quality standards, not change criteria to fix bad permits.</p>	<p>WildLaw</p>
<p>While new information from EPA should be considered on chemicals, DEQ should first consider all impacts on aquatic life and human health. DEQ should seek to reduce the discharge of toxins that may have cumulative or synergistic effects. Ammonia is currently proposed, under new EPA guidance, but freshwater mussels have not been taken into account.</p>	<p>SELC</p>
<p>Metals conversion factors should be addressed.</p>	<p>JRA</p>
<p>Supports numerical and narrative acute and chronic toxicity standards. Include most current scientific information and protocols regarding toxic pollutants/aquatic life criteria. Evaluate water clarity standards to achieve Bay 2000 sediment commitments.</p>	<p>DCR</p>
<p>Do not adopt criteria for substances that have no national guidance. For those with guidance, convene a technical workgroup to review whether substance is present in state waters, establish MDLs and QLs, consider attainability and variances (e.g. Ohio's statewide mercury variance). Include CAS numbers for non-regulatory purposes. Science supports existing magnitude for criteria but does not support duration and frequency. Duration is pollutant specific. However, a lack of data make it difficult to change these values. Also, could have substantial regulatory significance.</p>	<p>VAMWA</p>
<p>Higher numeric criteria violate the goal of the <i>Toxics 2000 Strategy</i>. DEQ should only adopt revisions to numeric criteria that result in reductions of toxic loading.</p>	<p>CBF</p>

Issue - Numeric Criteria (Human Health)	Organization
<p>Comments: Taste and odor compounds are considered secondary maximum contaminant levels (non-enforceable guidelines). The non-enforceable nature of these parameters should be reflected in the standards.</p> <p>Natural sources of fecal coliforms such as wildlife should not be listed as "impaired."</p> <p>All inconsistencies in 304(a) criteria should be addressed, including 1,1-Dichloroethylene</p> <p>Supports updates of human health criteria.</p> <p>VAMWA comments for aquatic life criteria apply to human health also.</p> <p>CBF comments for aquatic life criteria apply to human health also. 1,1-Dichloroethylene must be updated per EPA disapproval.</p>	<p>VMA, Dominion</p> <p>Zicht</p> <p>JRA</p> <p>DCR</p> <p>VAMWA</p> <p>CBF</p>
<p>Issue - Nutrient Enriched Waters (NEW)</p>	
<p>Comments: Most VA streams not sensitive to nutrients due to natural sources. Nutrients not necessarily conservative.</p> <p>Nutrient criteria are long overdue.</p> <p>NEW's should be considered and the regulation should be clarified to state that these waters are designated as impaired.</p> <p>NEW's should be evaluated by advisory committee. Amend standard to include a prohibition of additional nutrient discharges to waters impaired (provided language). This will aid in meeting Bay program strategies and agreements and aid in reduction measures for TMDL development.</p> <p>NEW's should be considered, particularly those listed as impaired, the Chesapeake Bay Program nutrient reduction goals and anticipated nutrient criteria.</p> <p>Include NEW designations and clarify designations.</p> <p>Better to rely on pending promulgation of nutrient criteria than in further implementing this policy.</p>	<p>Zicht</p> <p>WildLaw</p> <p>SELC, CBF</p> <p>CBF</p> <p>JRA</p> <p>DCR</p> <p>VAMWA</p>

Issue - Groundwater	Organization
<p>Comments: Groundwater regulations should be updated and remediation requirements should focus on health and ecological protection based on groundwater quantity, quality, use, and vulnerability to high priority and surface water ecosystems. In order to do this, a groundwater classification system should be developed that incorporates the ability to make a site-specific classification (provided guidance example from EPA). Regarding antidegradation, prevention of future contamination is appropriate, but forcing remediation to the high level of drinking water might encourage business development of pristine "greenfields" as opposed to redevelopment of "brownfields." The groundwater regulations should be removed from the water quality standards regulation.</p>	<p>VMA, Dominion, DuPont</p>
<p>Separate groundwater regulations.</p>	<p>Robinette</p>
<p>Separation of groundwater would be appropriate because most of the regulation applies only to surface waters. Separation would also make the regulation more consistent with the Clean Water Act and the federal water quality standards regulation, which only deals with surface water.</p>	<p>Navy</p>
<p>Do not separate since groundwater is considered to be state waters. All water quality standards should be in the same regulation.</p>	<p>JRA</p>
<p>Support additional criteria, standards, policies with expanded monitoring programs for different physiographic conditions. Keep as part of the standards. Willing to work with DEQ in doing this.</p>	<p>DCR</p>
<p>Separate but make changes during a separate rulemaking.</p>	<p>VAMWA</p>
<p>The 5 mg/L nitrate standard is not required or necessary for drainfield design and the 10 mg/L drinking water standard is sufficient.</p>	<p>Berry</p>
<p>May be desirable to separate since not Clean Water Act mandate but all impacts should be clarified and documented before doing so. Deletion of criteria appears to be premature.</p>	<p>CBF</p>

Issue - Copper Exemption for Reservoirs	Organization
<p>Comments: An exemption of the copper criteria in reservoirs should consider other impacts to industrial users of the reservoir. For example, an industrial user using water that originates from a copper-laden reservoir may then be subject to copper discharge limitations.</p> <p>Copper formulae are reliable and cost-effective means to control algae in Occoquan River. Formerly used powdered activated carbon at 70 mg, but that was still not very effective in controlling foul taste and odor. Using copper sulfate over PAC has estimated savings of over \$1 million annually.</p> <p>Opposed because copper is toxic and killing algae re-releases its nutrient components into the reservoir which feeds more algae growth and creates an endless cycle. Mechanical and biological controls must also be considered as well as watershed management techniques which provide storm water limits and non-point source controls to reduce nutrient loading.</p> <p>Any utility asking for a copper exemption should first demonstrate that watershed management controls have been employed.</p> <p>Do not support - copper adversely impacts natural heritage resources.</p> <p>Supports because of need to protect drinking water.</p> <p>Opposes exemption. Instead, investigate alternative treatments and reduce sources of nutrients.</p>	<p>VMA</p> <p>FCWA</p> <p>WildLaw and JRA</p> <p>WildLaw</p> <p>DCR</p> <p>VAMWA</p> <p>CBF</p>
<p>Variances - Issue</p>	
<p>Comments: Existing provisions are sufficient.</p> <p>Variances to numeric criteria may be allowed but variances from attaining designated uses should be prohibited.</p>	<p>VAMWA</p> <p>CBF</p>

Issue - Hampton Roads Water Effect Ratio (WER) for Copper	Organization
<p>Comments: The saltwater copper criterion for the Hampton Roads area should be modified to reflect the approved WER, the regulation should be clarified to apply these ratios to saltwater and the existing implementation procedures should be retained.</p> <p>A site-specific modification of the copper criterion using the EPA approved WER and recalculation procedure would more accurately reflect the required level of protection. WER procedures should continue as permit case decisions with implementation available also through rulemaking to ensure 305(b) and 303(d) listing decisions are based on scientifically supported criteria. Supports clarifying that WERs apply to saltwater and provided EPA guidance and regulation where it has been done.</p> <p>These WERs should be considered on a permit by permit basis and not addressed in the standards.</p> <p>Not applicable to large waters with discharges of varying quality.</p> <p>Concerned about the WER in Hampton Roads. Need justification.</p> <p>Do not support - copper adversely impacts natural heritage resources. Impacts to aquatic resources should be assessed first.</p>	<p>VMA, Dominion, VAMWA</p> <p>Navy</p> <p>SELC, CBF</p> <p>CBF</p> <p>JRA</p> <p>DCR</p>
<p>Issue - Special Standards</p>	
<p>Comments: There is no need for special nutrient standards in the Chickahominy River since it is a natural sink.</p> <p>Water quality varies with season and flow and biota have differing sensitivities based on season and flow. These varying conditions should be reflected in standards and permits.</p> <p>Interested in the special standards of the James River, Tuckahoe Creek and shellfish policy but uncertain as to what recommendations DEQ is considering.</p> <p>Should be updated to reflect current information and place emphasis on aquatic resources.</p> <p>Obsolete standards should be deleted.</p> <p>Revisions are justified when rigorous scientific review supports change.</p>	<p>Zicht</p> <p>Zicht</p> <p>JRA</p> <p>DCR</p> <p>VAMWA</p> <p>CBF</p>

Issue - Designated Uses	Organization
<p>Comments: Remove the public water supply designation from the section of the Roanoke River bound by the Route 746 bridge and a point five miles above the Staunton River State Park. There are no drinking water intakes here. Another alternative would be to adopt a permitting procedure that allows for the assimilative capacity of the main stem to be taken into account yet still ensure that the criteria are met at the intake to the drinking water system.</p>	<p>Dominion</p>
<p>Biologically-based water body use classification and assessment system and precisely defined, biologically-based, aquatic life uses and recreational uses should be developed. Opposed to the suggestion that stocked trout waters require dissolved oxygen criteria only when stream are stocked and temperature standard only apply during times when trout are expected to survive. Evidence should be provided as to when the stream are stocked, provide evidence that the fish don't survive, and evidence showing how long after stocking do we wait before letting the stream violate the standards. The agency should not remove the DGIF subclassifications as this is another symptom of the agency's denial of its mandate to protect aquatic life and ignore its obligation to protect uses identified by another state agency.</p>	<p>WildLaw</p>
<p>Opposed to a secondary contact recreational use. All state waters should be fishable and swimmable. Children are capable of swimming in any stream and should be protected.</p>	<p>SELC, JRA, CBF</p>
<p>DEQ should consider the restoration of aquatic life through water quality improvements, restocking programs, removal of physical impediments. Existing aquatic life and beneficial uses should be protected as well as historical species and have potential for restoration.</p>	<p>JRA</p>
<p>Include surface water use designations, stream descriptions and beneficial uses. Opposed to seasonal uses of trout streams. Should include upstream trout waters in downstream classification. Do not support uses that limit recreation. DCR requests to participate in use designations.</p>	<p>DCR</p>
<p>Supports seasonal uses for trout and other appropriate uses. Supports updates of use designations.</p>	<p>VAMWA</p>
<p>DGIF is willing to work with DEQ to update trout segments. Also, continuing to develop endangered and threatened designated streams in VA and will coordinate with DEQ on that.</p>	<p>DGIF</p>
<p>Use designations must be practically attainable before applying discharge criteria that are not justified by stream use. Currently, anything resembling a channel is considered as used for drinking, swimming, boating and fishing. The rule should protect beneficial uses as long as the uses are existing and demonstrated. The regulations must consider costs to small dischargers.</p>	<p>Hylton</p>

<p>Issue - Monitoring Comments: The regulations should not specify sampling monitoring; however monitoring guidance should specify that the samples must be representative of the water body as a whole.</p> <p>Sampling, monitoring and analytical procedures are better addressed in guidance.</p> <p>Procedures should be defined in the regulation for consistency.</p>	<p>Organization</p> <p>VMA</p> <p>VAMWA</p> <p>DCR</p>
<p>Issue - Reformatting the Regulation Comments: Yes, also supports revising the river basins and saltwater/freshwater delineation to match 305(b) report.</p> <p>Yes, with increased emphasis on water quality assessment, impairment listings, TMDLs and using the watershed approach. Supports consistency in the standards regulation and the numbering system in the 305(b) and 303(d) reports since they are so interrelated. Has no clear preference for either system as long as they are consistent.</p> <p>Supports reformat of regulation and consistent numbering system for river basins. Currently DEQ's basins do not meet the delineation of any standard basin description. Keep saltwater/freshwater delineations in standards as they are more precise than 305(b) although it is possible to creation designations for the same purpose from the National Wetlands Inventory.</p> <p>Yes, reformat so stream segments, uses and criteria can be easily identified.</p> <p>Yes, reformat but wait until technical revisions are done. Renumber river basins so consistent with 305(b) and 303(d).</p>	<p>VMA, VAMWA</p> <p>Navy</p> <p>DCR</p> <p>VAMWA</p> <p>CBF</p>
<p>Issue - Extend Comment Period Comments: Yes Yes Yes Yes</p>	<p>SELC CBF Sierra JRA</p>

Issue - Other Comments	Organization
<p>Comments: VMA would like to see only modifications in the regulation that will result in significant water quality improvements so that DEQ's resources can be used most effectively.</p>	VMA
<p>DEQ must engage in educational meetings in all regions of VA and provide sufficient notice and easily accessible background materials.</p>	FORVA
<p>Complete a cost/benefit analysis.</p>	FCWA
<p>Simplify the regulation.</p>	Robinette
<p>Protect designated uses by adopting regulations that are technically correct, necessary, and reasonable. Supports all VMA comments.</p>	Dominion
<p>Consider potential impacts of federally endangered species and/or designated critical habitat early in the triennial review process. EPA required by Endangered Species Act to ensure that any action is not likely to jeopardize existence of federally listed species or result in destruction or adverse modification of designated critical habitat.</p>	USFWS
<p>Supports all directives and suggestions made by the EPA to improve water quality. DEQ should regulate water for the protection of endangered and threatened species. Sediment criteria are long overdue.</p>	WildLaw
<p>Supports addressing all items suggested by EPA and supports strengthening water quality standards, both narrative and numeric to assure proper protection of state waters for public health, aquatic resources and the environment.</p>	JRA
<p>Make regulation clear and concise. Support inclusion of EPA outstanding issues.</p>	DCR
<p>All standards should be based on sound science and protect the environment in a cost-effective manner. Adopt a provision to provide that natural conditions are not "violations" and provide acceptable <i>de minimis</i> deviations (consider SC provisions).</p>	VAMWA
<p>Please consider the proven risk and benefits in any new changes. Standards should be supported by actual situations, not in labs. If changes are proven to be necessary, they should be done over cost effective periods of time.</p>	Berry

Issue - Participatory Approach	Organization
<p>Comments: Yes, provide participants sufficient background on reasons, outcomes and scientific basis. Consider a standing advisory committee, consultation with groups and public education and comment meetings.</p>	FORVA
<p>Yes, use standing committee with advice from ad hoc advisory groups or interested individuals to provide expertise. FCWA volunteers to assist with copper use in reservoirs issue.</p>	FCWA
<p>Opposed if used to negotiate away any strengthening of the WQS. In favor of a group that will work together on improving water quality.</p>	WildLaw
<p>Yes, select membership so that the public interest is equally represented with regulated entities, nonpoint sources, local and regional environmental organizations, League of Women Voters, Council on Indians, scientific community and other groups that generally represent the public.</p>	SELC
<p>Yes, please include JRA on committee.</p>	JRA
<p>Yes, use Standing Advisory Committee and DCR is willing to participate.</p>	DCR
<p>Yes, please include VAMWA.</p>	VAMWA
<p>Yes, form technical advisory committee.</p>	CBF

List of Acronyms:

- Berry = William A. Berry, Allison Soil Consultants, Huddleston, VA**
- CBF = Chesapeake Bay Foundation, Jeff Corbin, Virginia Staff Scientist**
- DCR = Department of Conservation and Recreation, David Brickley, Director**
- Dominion = Dominion Power, Pamela Faggert, Vice President and Chief Environmental Officer**
- DuPont = DuPont Spruance Plant, Robert L. Dunn, Environmental and Community Affairs Manager**
- DGIF = Department of Game and Inland Fisheries, Tom Wilcox, Environmental Services Section**
- FCWA = Fairfax County Water Authority, Thomas Bonacquisti, Director**
- FORVA = Friends of the Rivers of Virginia. Bill Tanger, Chair**
- Hylton = Brunk and Hylton Engineering, Inc, Royce Hylton, Jr. , P.E., Vice President**
- JRA = James River Association, Patricia Jackson, Executive Director**
- Navy = Department of the Navy, Mid-Atlantic Region, Steven G. Olson, Director Regional Coordination Department by direction of the Commander**
- Richmond = City of Richmond, Robert C. Wichser, P.E., REM, Chief Utility Engineer**
- Robinette = Ms. Billie B. Robinette, Hillsville, VA**

SELC = Southern Environmental Law Center, Pilar Penn, Associate Attorney and Katherine Slaughter, Senior Attorney

Sierra = Sierra Club, Glen Besa, Director

USFWS = United States Fish and Wildlife Service, Karen Mayne, Supervisor, Virginia Field Office

VAMWA = Virginia Association of Municipal Wastewater Agencies, Mark Haley, President

VMA = Virginia Manufacturers Association, Cathy Taylor, Vice President, Environmental Affairs

WildLaw = WildLaw, Virginia Office, on behalf of Virginia Forest Watch and Appalachian Voices, Tammy Belinsky

Zicht = Zicht Engineering, Limited, Eric Zicht, PE, LS

AGENCY RESPONSE: The agency response to the public comments is that we implemented the participatory approach and convened a technical advisory committee to advise staff on these amendments. Although there were generally two opposing viewpoints for each issue, the Board attempted to draft amendments that they believe to be environmentally protective, yet flexible enough to relieve some regulatory impact.

Clarity of the Regulation

Please provide a statement indicating that the agency, through examination of the regulation and relevant public comments, has determined that the regulation is clearly written and easily understandable by the individuals and entities affected.

Through examination of the regulation and relevant public comments, the agency has determined that the regulation is clearly written and easily understandable by the individuals and entities affected. The offices at this agency responsible for writing these amendments are the Office of Water Quality Programs and the Office of Water Permit Programs.

Periodic Review

Please supply a schedule setting forth when the agency will initiate a review and re-evaluation to determine if the regulation should be continued, amended, or terminated. The specific and measurable regulatory goals should be outlined with this schedule. The review shall take place no later than three years after the proposed regulation is expected to be effective.

The State Water Control law at § 62.1-44.15(3a) states that the Board shall, at least once every three years hold hearings for the purpose of reviewing the existing standards of quality, and, as appropriate adopt new standards or modify, or cancel existing standards. The regulatory goals associated with this regulation would be implemented via Virginia Pollutant Discharge Elimination System permits that are environmentally protective and based on the most recent science. Other goals will be seen in the publication of a new impaired 303(d) waters list that reflects this new science.

Family Impact Statement

Please provide an analysis of the proposed regulatory action that assesses the potential impact on the institution of the family and family stability including the extent to which 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 development of water quality standards is for the protection of public health and safety, which has only an indirect impact on families.