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Final Regulation
Agency Background Document

Approving authority name	State Water Control Board
Virginia Administrative Code (VAC) citation	9 VAC 25 - 820
Regulation title	General Virginia Pollutant Discharge Elimination System (VPDES) Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia
Action title	Develop new regulation
Document preparation date	August 14, 2006

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Orders 21 (2002) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual.*

Brief summary

Please provide a brief summary (no more than 2 short paragraphs) of the proposed new regulation, proposed amendments to the existing regulation, or the regulation proposed to be repealed. Alert the reader to all substantive matters or changes. If applicable, generally describe the existing regulation. Also, please include a brief description of changes to the regulation from publication of the proposed regulation to the final regulation.

This regulation establishes the registration and permitting of total nitrogen and total phosphorus loads discharged into the Chesapeake Bay Watershed in Virginia, and establishes procedures by which those loads may be exchanged among those permittees located in the respective Chesapeake Bay tributary watersheds. The regulation includes registration requirements, effluent limitations, compliance plan and schedule requirements, monitoring and reporting requirements, conditions under which nutrient trading is permitted, conditions applicable to new and expanded facilities, and conditions applicable to all facilities covered under this permit. This permit differs from other VPDES general permits in that: 1) the compliance schedule focuses on the aggregate performance of all of the facilities within a tributary watershed as opposed to the individual facilities themselves, 2) the permit will be issued in addition to the individual VPDES permits that the affected facilities are already required to hold, and 3) rather than outlining facilities that may register for permit coverage, it incorporates all VPDES dischargers by rule and requires specific categories of facilities to register for coverage under the general permit and comply with the requirements therein.

Changes to the regulation from publication of the proposed regulation to the final regulation include changes to definitions to resolve apparent discrepancies within the regulation, changes to the final compliance dates in the tributary-wide schedule of compliance, additional requirements pertaining to the determination of load limits, additional requirements pertaining to the exchange of nutrient loads by permittees, and additional requirements pertaining to new and expanding facilities offsetting the additional nutrient loads discharged by their operations.

Statement of final agency action

Please provide a statement of the final action taken by the agency including (1) the date the action was taken, (2) the name of the agency taking the action, and (3) the title of the regulation.

Enter statement here

Legal basis

Please identify the state and/or federal legal authority to promulgate this proposed regulation, including: (1) the most relevant law and/or regulation, including Code of Virginia citation and General Assembly chapter numbers, if applicable, and (2) promulgating entity, i.e., agency, board, or person. Describe the legal authority and the extent to which the authority is mandatory or discretionary.

The basis of this regulation is §62.1-44.19:14 of the Code of Virginia as amended in the 2005 session of the General Assembly. As amended, §62.1-44.19:14 directs the State Water Control Board to issue a Watershed General Virginia Pollutant Discharge Elimination System (VDPES) Permit authorizing point source discharges of total nitrogen and total phosphorus to the waters of the Chesapeake Bay and its tributaries. Section 402 of the Clean Water Act (33 USC 1251 et seq.) authorizes states to administer the NPDES permit program under state law. The Commonwealth of Virginia received such authorization in 1975 under the terms of a Memorandum of Understanding with the U.S. EPA. This Memorandum of Understanding was modified on May 20, 1991 to authorize the Commonwealth to administer a General VPDES Permit Program. Legal authority for issuing general permits under State Water Control Law is §62.1-44.15(5), 15(10), and 15(14).

Purpose

Please explain the need for the new or amended regulation. Describe the rationale or justification of the proposed regulatory action. Detail the specific reasons it is essential to protect the health, safety or welfare of citizens. Discuss the goals of the proposal and the problems the proposal is intended to solve.

In 2005, the State Water Control Board approved amendments to 9 VAC 25-40 (the Regulation for Nutrient Enriched Waters and Dischargers within the Chesapeake Bay Watershed) and to 9 VAC 25-720 (the Water Quality Management Planning Regulation). These regulatory actions, taken together, established permit limitations for two nutrients -- total nitrogen and total phosphorus -- for certain dischargers within Virginia's portion of the Chesapeake Bay watershed. The resulting permit limitations will be expressed principally as annual loads, and also as technology-based annual average concentrations where appropriate and authorized.

This rulemaking is proposed to provide a permitting framework that fulfills the intent of the aforementioned regulatory actions, in accordance with 2005 amendments to §62.1-44.19:14 of the Code of Virginia; these amendments direct the State Water Control Board to issue a Watershed General Virginia Pollutant Discharge Elimination System Permit authorizing point source discharges of total nitrogen and total phosphorus to the waters of the Chesapeake Bay and its tributaries. The 2000 Chesapeake Bay Agreement and multi-state cooperative and regulatory initiatives establish allocations for nitrogen and phosphorus delivered to the Chesapeake Bay watershed. These initiatives will require public and private point source dischargers of nitrogen and phosphorus to achieve significant reductions of these nutrients to meet the cap load allocations. The Virginia General Assembly found that adoption and utilization of a watershed general permit and market-based point source nutrient credit trading program will assist in meeting these cap load allocations cost-effectively and as soon as possible in keeping with the 2010 timeline and objectives of the Chesapeake 2000 agreement, accommodating continued growth and economic development in the Chesapeake Bay watershed, and providing a foundation for establishing market-based incentives to help achieve the Chesapeake Bay's non-point source reduction goals.

These actions are needed because nutrients discharged from wastewater treatment plants contribute to the overall loading of nutrients to the Chesapeake Bay and its tributaries. These nutrients have been identified as pollutants contributing to adverse impacts on large portions of the Bay and its tidal rivers, which are included in the list of impaired waters required under §303(d) of the Clean Water Act and §62.1-44.19:5 of the Code of Virginia. Waters not meeting standards will require development of a Total Maximum Daily Load (TMDL), also required under the same sections of federal and state law. In May 1999, EPA Region III included most of Virginia's portion of the Chesapeake Bay and extensive sections of several tidal tributaries on Virginia's 1998 impaired waters list. The *Chesapeake 2000 Agreement* commits Virginia to the goal of removing the Chesapeake Bay and its tidal tributaries from the list of impaired waters by 2010. Thus, the development of a TMDL for the entire Chesapeake Bay is not being scheduled until 2010, anticipating that the Chesapeake Bay Program partners can cooperatively achieve water quality standards by that time making a Bay wide TMDL unnecessary. These regulatory actions will help to meet the goals of the *Chesapeake 2000 Agreement*.

Substance

Please identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. A more detailed discussion is required under the "All changes made in this regulatory action" section.

This will be a new general permit regulation. In accordance with §62.1-44.19:14, the general permit will include 1) wasteload allocations for total nitrogen and total phosphorus for each permitted facility expressed as annual mass loads, 2) a schedule requiring compliance with the waste load allocations, 3) monitoring and reporting requirements, 4) a procedure requiring affected owners or operators to secure general permit coverage, 5) a procedure for efficiently modifying the list of facilities covered by the general permit, and 6) such other conditions as the Board deems necessary to carry out the provisions of State and Federal law.

Issues

Please identify the issues associated with the proposed regulatory action, including:

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 indicate.

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1) This proposed general permit complements the previously approved amendments to 9 VAC 25-40 (the Regulation for Nutrient Enriched Waters and Dischargers within the Chesapeake Bay Watershed) and to 9 VAC 25-720 (the Water Quality Management Planning Regulation) and is intended to provide compliance flexibility to the affected facilities in order to ensure the most cost-effective nutrient reduction technologies are installed within the respective tributary watersheds. As this general permit is subject to 9 VAC 25-20-130.5, facilities required to register for permit coverage shall pay a permitting fee of $600 in each five-year term of this general permit. Other monitoring and reporting requirements should either replace, or impose minimal additional requirements above, those already in the affected facilities' individual VPDES permits. While it is recognized that more stringent nutrient removal requirements will impose higher costs on the regulated community (which will be passed on to rate-payers and other customers), the cost savings of this market-based approach (as opposed to a traditional regulatory program) will also be realized by the regulated community and presumably passed on as well. The economic benefits of cleaner water are less tangible, but improved water quality in the Chesapeake Bay should result in increased tourism and productivity from the seafood and fisheries industries.
2) When issued, this general permit will, at one time, impose load limits and compliance plan requirements on 127 facilities. In the absence of this general permit, these requirements would have to be individually negotiated and publicly noticed for each of the affected facilities. In addition, providing facilities flexibility in which to manage their aggregate impact on the Chesapeake Bay will reduce DEQ's focus on permit enforcement while still achieving the Commonwealth's environmental objectives. This will enable DEQ to direct its resources toward other issues. It should be noted, however, that the concept of purchasing wasteload allocations from non-point best management practices in order to offset the growth of point source discharges is an area in which the Commonwealth currently has no experience, and it is anticipated that there will be costs to the Commonwealth related to the review, tracking and inspection of these non-point best-management practices.
3) This proposed regulatory action should pose no disadvantages to the public or to the Commonwealth.

Changes made since the proposed stage

Please describe all changes made to the text of the proposed regulation since the publication of the proposed stage. For the Registrar's office, please put an asterisk next to any substantive changes.

Section number	Requirement at proposed stage	What has changed	Rationale for change
10	Definition of "delivery factor"	Additional language capping delivery factor at 1.00 for the purpose of this regulation	Chesapeake Bay Model used delivery factors >1.00 to account for observed effects not caused by dischargers
10	Definition of "equivalent load"	Additional language correlating discharged loads to given treatment works design flows	Existing language was not consistent with other definitions in regulation
10	Definition of "expansion" or "expands"	Specified that change occurs at treatment works to increase design flow capacity	Existing language did not facilitate consistent application of the regulation among industrial dischargers

10	Definition of "non-significant discharger"	Additional language to clarify definition	Existing language was not internally consistent
10	Definition of "permitted design capacity"	Additional language defining how permitted design capacity is to be calculated	Additional language was originally proposed to be in implementation guidance; subsequently determined that it was appropriate in regulation
10	Definition of "quantification level"	New definition in regulation	Term included in another change to regulation and inclusion of definition was deemed necessary
70, Part I.B.1.	Establishes annual load limits	Added "mass" to "annual mass load limit"	Existing language was not internally consistent with other conditions that were changed in response to public comments
70, Part I.B.2.	Aggregation of load limits for multiple facilities under common ownership or operation	Additional language defining how compliance with load limit and generation of credits are to be determined	During public comment period, several commenters requested clarification of this condition
70, Part I.B.4.	Determination of whether discharged load originated in intake water	Additional language detailing information to be submitted by permittee pursuant to this condition	Requested by EPA
70, Part I.B.5	Determination of whether discharged load is bioavailable in the Chesapeake Bay	Additional language detailing information to be submitted by permittee pursuant to this condition	Requested by EPA
70, Part I.C.1	Agency review of compliance plans	Additional language detailing modification of compliance schedule after agency review of compliance plans in accordance with §62.1-44.19:14.C.2 of the Code of Virginia	Additional language added to make this condition consistent with Part I.D. and with §62.1-44.19:14.C.2 of the Code of Virginia
70, Part I.C.2	Load limit effective dates for individual facilities	Established default compliance date for facilities waiving compliance schedule	Additional language clarified requirements that were already in Section 40 A.2.
70, Part I.D.	Annual update for compliance plans	Deleted language referring to modification of compliance schedule after agency review of annual updates	Language included in Part I.C.1.
70, Part I.E.1.	Frequency of monitoring of nutrients	Clarified conditions under which monitoring was required	During comment period, permittee expressed confusion with thresholds listed in this condition
70, Part I.E.2. and I.E.3.	Sample collection condition	Clarified language pertaining to alternate sampling/monitoring procedures	During comment period, permittees expressed confusion with what this condition allowed
70, Part I.E.4.	Monthly reporting of discharged loads	Provided additional equation in load calculations and added language pertaining to data below the analytical quantification level	During comment period, permittee requested additional equation; in subsequent TAC meeting, TAC member requested that the permit contain specific language pertaining to quantification levels
70, Part I.J.2.	Acquisition of credits from other facilities	Specified facilities from whom credit purchases may be made (those whose load limits were	During comment period, permittees requested that credits be generated and sold by facilities whose load limits

		derived from waste load allocations in 9 VAC 25-720)	were derived from permitted design capacities
70, Part I.J.2.c.	Acquisition of credits from other facilities	Clarified language pertaining to local water quality based limitations	Existing language identified as being inconsistent with legislation
70, Part I.J.3.	Acquisition of credits from Water Quality Improvement Fund	Added conditions under which the acquisition may occur, including language pertaining to local water quality based limitations	Existing language identified as being inconsistent with legislation and Section 70, Part I.J.2.
70, Part II.A.3.	Requirement to offset additional loads from new and expanded facilities	Added condition addressing aggregation of load limits for multiple facilities under common ownership or operation	During comment period, permittee requested that offsets only be required when discharge exceeded aggregate load limit
70, Part II.B.	Acquisition of nutrient reductions to offset additional loads from new and expanded facilities	Added conditions under which the acquisition may occur, including language pertaining to local water quality based limitations, and clarified language pertaining to submittal and approval of acquisitions	Existing language identified as being inconsistent with legislation and Section 70, Part I.J.2.
70, Part III.J.4.	Monitoring methods	Updated version of 40 CFR Part 136	Artifact in regulation boilerplate
70, Part III.L.4.a.	Reporting of monitoring results	Removed language pertaining to sludge generation and disposal	Artifact in regulation boilerplate

Public comment

Please summarize all comments received during the public comment period following the publication of the proposed stage, and provide the agency response. If no comment was received, please so indicate.

A. Definitions (9 VAC 25-820-10)

1. **Comment:** The definitions of "permitted design capacity" and "waste load allocation" should be clarified. (EPA, VAMWA, Alexandria Sanitation Authority, Prince William County Service Authority, Rapidan Service Authority, Harrisonburg-Rockingham Regional Sewer Authority, Hopewell Regional Wastewater Treatment Facility, Frederick-Winchester Service Authority, South Central Wastewater Authority, Upper Occoquan Sewage Authority, Hanover County Department of Public Utilities, Loudoun County Sanitation Authority, City of Lynchburg Department of Utilities, Spotsylvania County, City of Richmond Department of Public Utilities, Hampton Roads Sanitation District, Louisa County Water Authority, Amelia County).

Response: *The general permit language for "permitted design capacity" has been modified to resolve the inconsistencies between these definitions.*

2. **Comment:** The definition of "existing facility" should be changed to include any industry authorized to discharge wastewater through a separate outfall subject to a VPDES permit held by local government. (Bear Island Paper Company, Hanover County)

Response: *No action taken. The requested change would cause the proposed general permit regulation to not conform with § 62.1-44.19:14.C.5. of the Code of Virginia, which identifies "facilit(ies) authorized*

by a Virginia Pollutant Discharge Elimination System permit" as either permitted by rule or subject to registration requirements.

3. **Comment:** The definition of "non-point source credit" should be provided (Chesapeake Nutrient Land Trust)

Response: *No action required. There is no "non-point source credit" as the legislation does not permit point-nonpoint trading for the purpose of compliance with a facility's annual load limit. New and expanding facilities may offset their discharges of nutrients by acquiring load reductions from non-point management practices; these reductions are defined in the regulation by the conditions under which they are generated, and guidance under development by DEQ and DCR will further define these reductions.*

4. **Comment:** The definitions of "point source and non-point source should be provided in order to clarify the sources of credits/offsets (MS4's?); also, offsets obtained by non-point BMPs should be considered "loads", not "waste loads" (U.S. Navy, Mid-Atlantic Region)

Response: *No action taken. The legislative definition of "waste load allocation" accounted for the acquisition of what are defined as offsets in the general permit regulation.*

5. **Comment:** The definition of "expansion" should include existing facilities that propose to discharge beyond "permitted design capacity" (Environmental Banc & Exchange)

Response: *No action taken. The aforementioned changes to the definition of "permitted design capacity" should be sufficient to accomplish the intent of this comment.*

6. **Comment:** The definition of "expansion" should specifically address activities at the wastewater treatment works as opposed to process changes at an industrial facility, and the term "upgrade" should be defined in the regulation to specifically address improvements at the wastewater treatment facilities. (VMA, Merck, Smurfit-Stone, R.J. Reynolds, Coors)

Response: *The definition of expansion has been changed to reflect activities occurring at the treatment works. The comment regarding "upgrade" pertains to 9 VAC 25-820-30 B, which states that the requirements of 9 VAC 25-40 may be more stringent depending on the nutrient control technology installed at the facility. As the suggested definition is actually more applicable to another regulation, no action will be taken to revise the proposed regulation; the agency may address this concern in implementation guidance.*

7. **Comment:** The use of the term "equivalent load" should be made consistent throughout the regulation. (Merck, Cogentrix), and some delineation of the fall line should be made to assist permittees in determining their status (Cogentrix)

Response: *The definitions of "equivalent load" and "non-significant discharger" have been revised to eliminate confusion as to when an industrial facility is, or is not, a significant discharger. A map showing the watersheds used in the Chesapeake Bay Model will be posted on line to help permittees understand their location with respect to the fall line.*

8. Comment: the definitions for Equivalent Load, Existing Facility and New Discharge should be changed to reflect other VPDES regulations (9 VAC 25-40 and 9 VAC 25-720) (Hampton Roads Sanitation District)

Response: *No action taken. As the general permit regulation was developed, a number of definitions from the aforementioned regulations were modified to address situations that were not previously contemplated. Several of those modifications are discussed above.*

9. **Comment:** The definitions of "existing facility", "new" and "expanded" facilities should be changed to reflect when a facility has a permit with limits at a given design rate as opposed to when a Certificate to Construct is issued for a given design rate (Boston Water and Sewer Company)

Response: *It is the Commonwealth's intention to cap and reduce nutrient loadings to the Chesapeake Bay from all sources of discharges, and the new statute addresses point source discharges.*

DEQ's implementation of the statute is to require existing significant discharges [≥0.50 mgd above the fall line or ≥0.10 mgd below the fall line] to reduce their loadings, and for existing non-significant discharges [≤0.50 mgd above the fall line or ≤0.10 mgd below the fall line] to not increase their loadings.

This approach is consistent with the objectives of the new statute since it holds the line on loadings from the non-significant dischargers in accordance with their existing design capacities, not permitted design flows, so as to maximize protection of the bay and minimize the expense associated with retrofitting facilities. Concurrent with this decision is the decision to require facilities not yet built, and expansions not yet begun, to meet the full potential of nutrient reduction since new construction is the most economical opportunity to protect the bay.

This approach is reflected and substantiated by the State Water Control Board's recent adoption of 9 VAC 25-40-10 et seq., Regulation for Nutrient Enriched Waters and Dischargers within the Chesapeake Bay Watershed, in which the term "Expansion" or "expands" is defined as follows: means initiating construction of a facility after July 1, 2005, to increase treatment capacity, except that the term does not apply in those cases where a Certificate To Construct was issued on or before July 1, 2005.

B. Compliance Plans (9 VAC 25-820-40)

1. **Comment:** Compliance plans should be forwarded to DEQ as individual plans, whether directly from the facilities or through the Nutrient Credit Exchange Association. (EPA)

Response: *No action taken. DEQ believes that either format of compliance plan submittal is acceptable.*

2. **Comment:** The deadline for compliance plan submittal in the regulation is shorter than that in the enabling legislation. How long will it take DEQ to review these plans? (Hampton Roads Sanitation District)

Response: *No action taken. DEQ was advised that the effective date of the regulation could be substituted for the effective date of the permit, and the Technical Advisory Committee concurred with this approach. In addition, the enabling legislation has been in effect since July 2005, and the regulation establishing annual load limits for significant dischargers was approved in December 2005; facilities are free to develop compliance plans for submittal (several have initiated this to some degree in order to comply with the Basis of Design and Interim Operability Plan requirements in their individual permits).*

As DEQ will have to review the compliance plans not only on their own merit, but in the context of other plans received for facilities within a given tributary (for example, not all of the facilities in a tributary could plan to comply with their load limits by acquiring credits from one another), the review time is unknown, but should have minimal impact on a multi-year compliance schedule.

C. General Permit (9 VAC 25-820-70), Part I.A., Authorized Activities

1. **Comment:** The regulation should govern facilities authorized to discharge pursuant to individual VPDES permits (as opposed to only those facilities holding individual VPDES permits), and facilities should be allowed to register for general permit coverage accordingly. (Bear Island Paper Company, Hanover County)

Response: *No action taken. The requested change would cause the proposed general permit regulation to not conform with § 62.1-44.19:14.C.5. of the Code of Virginia, which identifies "facilit(ies) authorized by a Virginia Pollutant Discharge Elimination System permit" as either permitted by rule or subject to registration requirements.*

2. **Comment:** Existing facilities that reduce their nutrient discharge to zero should not be prevented from selling nutrient credits, and new facilities that are not intended to discharge should not be required to obtain VPDES permits in order to trade credits. (Bernard C. Nagelvoort, VMA, Honeywell, R.J. Reynolds)

Response: *No action taken. Existing significant dischargers that achieve compliance with their load limits by not discharging (assuming they retain their individual VPDES permit in accordance with § 62.1-44.19:14.C.5. of the Code of Virginia, which identifies "facilit(ies) authorized by a Virginia Pollutant Discharge Elimination System permit" as either permitted by rule or subject to registration requirements).*

D. General Permit (9 VAC 25-820-70), Part I.B., Waste Load Allocations

1. **Comment:** Net loading evaluations should be conducted in a manner consistent with the assumptions and methods used to derive the waste load allocations through the Chesapeake Bay models, and the permit conditions should be more explicit regarding aspects of compliance (monitoring, trading) related to net loading. (EPA)

Response: *The general permit has been modified to ensure that the evaluations are conducted in a manner consistent with the assumptions and methods used in the Chesapeake Bay modeling.*

2. **Comment:** Bioavailabilty demonstrations should address degradation of the nutrient within a natural environment for the amount of time it is expected to remain in the Chesapeake Bay watershed, and changes to load limits should be conducted in a manner consistent with the assumptions and methods used to derive the waste load allocations through the Chesapeake Bay models. (EPA)

Response: *The general permit language has been modified to include these requirements.*

3. **Comment:** DEQ should subject any revisions to waste load allocations and delivery factors to a 30-day comment period and SWCB approval (Chesapeake Bay Foundation)

Response: *As any revision of the waste load allocations and delivery factors would require a revision of regulations, these revisions will be made in accordance with the APA.*

4. **Comment:** Objected to footnotes in Registration List pertaining to load limits on the basis that they imposed requirements more restrictive than the Water Quality Management Plan Regulations from which the load limits were derived. (Harrisonburg-Rockingham Regional Sewer Authority and Hanover County

Department of Public Utilities, regarding facilities with proposed expansions; City of Lynchburg Department of Utilities and City of Richmond Department of Public Utilities, regarding dry weather flow from facilities with Combined Sewer Overflow outfalls)

Response: *The footnotes in the registration statement have been modified to be consistent with the Water Quality Management Planning Regulation (9 VAC 25-720-10 et seq.).*

The language pertaining to dry weather flows from facilities with CSO outfalls will be revised.

5. **Comment:** Objected to language pertaining to net loading (nutrients present in the intake water from the river, as applicable") on basis that it was imprecise and unclear (Loudoun County Sanitation Authority)

Response: *No action required. This condition allows for the possibility that facilities may be discharging nutrients that they did not introduce into the wastewater; removal of the phrase above would render this general permit condition meaningless.*

E. General Permit (9 VAC 25-820-70), Part I.C., Schedule of Compliance

1. **Comment:** The permit fact sheet should justify tributary-wide schedules of compliance are "as soon as possible". (EPA)

Response: *The permit fact sheet has been modified to include this justification.*

2. **Comment:** Facilities that are able to achieve and maintain compliance with their load limits should not receive a compliance schedule, but must comply with their load limits on the effective date of the permit. (EPA)

Other commenters requested that the permittee, not DEQ, determine whether a compliance schedule is necessary (VMA, Smurfit-Stone, R.J. Reynolds, Coors), that the permittee determine when compliance with their load limit has been achieved, and that the actions taken to comply with the permit not be limited to capital projects (Merck)

Response: *No action required. Staff believes that the existing regulatory language provides permittees with an opportunity to demonstrate that the compliance schedule is necessary, given their individual circumstances (the language in the regulation refers to "any capital projects and implementation schedules needed", and process changes, source reduction etc. would be included in this); in the absence of that demonstration, the permittee should expect to comply with the annual load limits from the outset of the general permit. After undertaking the "implementation schedule needed", the permittee should expect to comply with the annual load limits once monitoring has demonstrated that capability.*

3. **Comment:** DEQ should not extend tributary-wide compliance dates past 1/1/11, (EPA, Piedmont Environmental Council, James River Association, Chesapeake Bay Foundation, Bernard C. Nagelvoort, Donna Wilkins, Linda Centorrino, C.J. Gibbs, Gail Troy, Glenn Miller, Donna Huggins, Mrs. Jerry Mullinax, Doug Beckmann, Paul Rizzo, Robert Diamond, Andrew Cohen, David Harrington, Lynn Harris, Ms. N.B., Jennifer Dyson, John Ragosta, Joe Lerch, Nina Michael, Elizabeth Gibbs, Tim Gabbert, Lisa Guthrie, Stella Jones, John Bevis, Michael Gildea, Elizabeth Richardson, Gregg Hudson, Catherine Gilliam, Errol Plata, Nancy Lenz, Charlie Loudermilk, Star Womanspirit, Cynthia Wackerbarth, Orv Lehman, Gary Dufur, John Drain, Katie Bidinger, Raymond Helm, Marion M. MacRae, Barry O'Keefe, Charles Denny, Rita Costello, Carl Abramson, Richard Carpenter, Elaine Shaw, Marcus Walther, Mark

Endries, Paul DiMarco, Jill Hoehlein, James Gibson, Sheryl Smith, Rachel Olson, Kayce Cover, Audrey Clement, Philip Prisco, Myron Drewniak, Jim Wharry, Patricia Wharry, Fletcher Stevens, Mark Zimmerman, Diana Parker, Robert Dawson, Andrew Carter, Patricia Churchman, Warren G, Charles Creighton, Todd Green, James Boissonnault, Sarah Sinsabaugh, Carol Warren, Louis Schiavo, Claire Wyngaard, Trent Richardson, Willie Mills, Susan Porter Beffel, Charles Wight, Brian Glover, Howard Urbach, Teos Abadia, Robin Curtis, Marjorie Streeter, Helen Sanders, Clemans Powell, Thomas McKillop, Andrea Leonard, Barbara Williams, Miriam Riggs, John Reeves, Karen Fedorov, Carl Little, Doreen Thompson, Carrie Wortham, Dana Cook, Jennifer Hollar, Frank Witt, James Connor, Brian Moores, Patricia Kurpiel, Sandra Davis, Elizabeth-Reid Becker, William V. Brierre Jr., Thomas Fore, Janet Worsham, Gessica Coolness, Constance Hartke, Dr. R. Chris Jones) and that facilities not able to meet this date receive compliance schedules in an enforcement order. (EPA)

Other commenters requested that DEQ allow industrial facilities to account for bioavailability and/or intake credit demonstrations as part of their compliance plans (VMA, Merck), or that it may not be possible to achieve the compliance dates listed in the schedule of compliance (Merck, Maury Service Authority, City of Fredericksburg)

Other commenters requested that DEQ either extend the tributary compliance dates to 12/31/15, or, if the default compliance date of 1/1/11 is maintained, for DEQ to allow individual facilities to demonstrate that it is necessary to extend the compliance date past 1/1/11, but in no case later than 12/31/15. (VAMWA, Alexandria Sanitation Authority, Prince William County Service Authority, Rapidan Service Authority, Harrisonburg-Rockingham Regional Sewer Authority, Hopewell Regional Wastewater Treatment Facility, Frederick-Winchester Service Authority, South Central Wastewater Authority, Upper Occoquan Sewage Authority, Hanover County Department of Public Utilities, Loudoun County Sanitation Authority, City of Lynchburg Department of Utilities, Spotsylvania County, City of Richmond Department of Public Utilities, Hampton Roads Sanitation District)

Response: *§ 62.1-44.19:14 C.2. of the Code of Virginia states that the general permit shall contain:*

"A schedule requiring compliance with the combined waste load allocations for each tributary as soon as possible taking into account (i) opportunities to minimize costs to the public or facility owners by phasing in the implementation of multiple projects; (ii) the availability of required services and skilled labor; (iii) the availability of funding from the Virginia Water Quality Improvement Fund as established in § 10.1-2128, the Virginia Water Facilities Revolving Fund as established in § 62.1-225, and other financing mechanisms; (iv) water quality conditions; and (v) other relevant factors. Following receipt of the compliance plans required by subdivision C 3, the Board shall reevaluate the schedule taking into account the information in the compliance plans and the factors in this subdivision, and may modify the schedule as appropriate;"

The 1/1/11 compliance date for both nitrogen and phosphorus for all basins is reasonably aggressive and has been retained; additional permit language, citing the five factors above, has been added. This additional language provides that the permit may be reopened to modify the compliance date for nitrogen, phosphorus or both parameters in one or more basins.

4. **Comment:** The tributary-wide schedules of compliance and associated compliance plans should be consistent with 40 CFR 122.47, including interim requirements and deadlines. (EPA)

Response: *No action taken. DEQ believes that the requirements of 40 CFR 122.47 are fulfilled in the existing general permit language.*

5. **Comment:** The tributary-wide schedules of compliance should not in any way be associated with interim limits for individual facilities. (Hampton Roads Sanitation District, Alexandria Sanitation Authority, Prince William County Service Authority, Rapidan Service Authority, Harrisonburg-Rockingham Regional Sewer Authority, Frederick-Winchester Service Authority, South Central Wastewater Authority, City of Lynchburg Department of Utilities, City of Richmond Department of Public Utilities, Hanover County Department of Public Utilities)

Response: *No action taken. No interim limits are contained in the existing general permit language or registration list.*

F. General Permit (9 VAC 25-820-70), Part I.D., Annual Update of Compliance Plans

1. **Comment:** Requested basis for changing tributary-wide schedules of compliance based on information received in annual compliance plan updates (EPA), and that the updates are no longer required once compliance is achieved and the load limits have become effective (Hampton Roads Sanitation District).

Response: *§ 62.1-44.19:14.C.2. of the Code of Virginia authorizes the Department to modify the tributary-wide compliance dates in the context of the following factors: (i) opportunities to minimize costs to the public or facility owners by phasing in the implementation of multiple projects; (ii) the availability of required services and skilled labor; (iii) the availability of funding from the Virginia Water Quality Improvement Fund as established in § 10.1-2128, the Virginia Water Facilities Revolving Fund as established in § 62.1-225, and other financing mechanisms; (iv) water quality conditions; and (v) other relevant factors.*

Depending on a particular facility's circumstances, it may be necessary for them to continue submitting annual compliance plan updates; rather than develop a blanket waiver for these updates, DEQ prefers to evaluate the need for annual compliance plan submittals when this general permit is reissued.

G. General Permit (9 VAC 25-820-70), Part I.E., Monitoring Requirements

1. **Comment:** Monitoring requirements should be clarified to allow permittees to sample at frequencies more stringent than required without further approval. (Bear Island Paper Company)

Another comment was that the frequencies were not consistent with the DEQ Permit Manual and that reduced sampling frequencies should be allowed for facilities as an alternative regulatory method. (Hampton Roads Sanitation District)

Response: *The sample frequencies in the general permit were developed after review of existing guidance (VPDES manual) and consideration of the need for information in light of ongoing Chesapeake Bay water quality modeling and the trading program. Facilities that consistently comply with their load limits already derive a benefit in that they will be generating and selling credits.*

Permittees already have the ability to sample at frequencies more stringent than required without further approval, the permit language has been modified to make this explicit.

2. **Comment:** The regulation should be amended to include a formula for computing the Monthly Average Load. (Bear Island Paper Company)

Response: *The general permit language has been modified to include this formula.*

3. **Comment:** Discharge reporting should be done quickly and practically (John Reeves)

Response: *No action required; the general permit requires reporting to be at least as frequent and as timely as do the individual permits currently issued to the facilities in question. Electronic reporting may be an option for this permit.*

4. **Comment:** DEQ should not assign default quantification levels for parameters; monitoring provisions should account for results that are not representative of a facility's discharge, and facilities with successful intake or bioavailability demonstrations should be eligible for reduced monitoring (VMA, Smurfit-Stone, Honeywell, R.J. Reynolds)

Response: *No action required. The general permit does not assign quantification levels (it would be in the interest of the permittee to select as low a QL as reasonably attainable); the permit allows facilities to sample more frequently than the base requirements (which should help account for non-representative events), and as netting/bioavailability demonstrations will result in the permittee receiving a lower load limit, the monitoring frequency (driven from load limits) might be reduced accordingly.*

5. **Comment:** It is not obvious whether the loads listed in the monitoring tables are for influent or effluent loads (Merck)

Response: *The permit language has been modified to make it clear that for industrial facilities, the monitoring frequency is determined by the facility's respective load limits.*

6. **Comment:** Facilities may sample for compliance with non-nutrient parameters in their individual permits; the associated sampling locations may not be applicable to nutrient monitoring (Merck)

Response: *The permit language has been modified to allow alternate sample locations upon approval by the Department.*

H. General Permit (9 VAC 25-820-70), Part I.H., Registration

1. **Comment:** New and expanding facilities should be required to identify the sources of waste load allocations to be acquired or transferred. (Chesapeake Bay Nutrient Land Trust)

Response: *No action taken. It is not uncommon for applicants to apply for a permit several years before commencing discharge, and the precise source of allocation to be acquired may not be known at the time of application/registration.*

2. **Comment:** Registration statements should be sent to the applicable regional office as opposed to DEQ-Central Office. (Hampton Roads Sanitation District)

Response: *No action taken. It is possible that multiple facilities, under common ownership or operation and located in the same tributary, may be located in areas served by multiple DEQ regional offices. While registration statements and other submittals related to the general permit will ultimately be forwarded to regional staff, some degree of initial central coordination will be necessary.*

I. General Permit (9 VAC 25-820-70), Part I.I., Public Notice Requirements

1. **Comment:** DEQ should provide a copy of the public notice either by electronic means or by the US Mail to members of the public who request the notices (Chesapeake Bay Nutrient Land Trust)

Response: *No action required. DEQ maintains a web page on which new permit applications are listed, and members of the public are currently able to request inclusion on agency mailing lists.*

J. General Permit (9 VAC 25-820-70), Part I.J., Compliance with Waste Load Allocations

1. **Comment:** Compliance credits acquired through WQIF should be generated in the same calendar year, that trading is "pounds for pounds", and the WQIF transactions should be subject to conditions similar to those for permitted facilities. (EPA, James River Association)

Response: *The general permit has been modified to account for these issues.*

2. **Comment:** Questioned how cost of compliance credits from WQIF was determined, whether set cost of compliance credits undermined market forces (EPA, VAMWA, Alexandria Sanitation Authority, Prince William County Service Authority, Rapidan Service Authority, Harrisonburg-Rockingham Regional Sewer Authority, Hopewell Regional Wastewater Treatment Facility, Frederick-Winchester Service Authority, South Central Wastewater Authority, Upper Occoquan Sewage Authority, Hanover County Department of Public Utilities, Loudoun County Sanitation Authority, City of Lynchburg Department of Utilities, Spotsylvania County, City of Richmond Department of Public Utilities, Hampton Roads Sanitation District, Colonial SWCD), was inappropriately low (Environmental Banc & Exchange), were unreasonably high (Merck) or unreasonably inflexible (Chesapeake Bay Nutrient Land Trust).

Response: *The enabling legislation established the bases by which the cost of credits is to be calculated. A detailed explanation of the methodology, as well as the raw data reviewed, will be provided on the agency web page.*

3. **Comment:** Requested clarification of clause "diligently sought but are unable to acquire" (credits). (EPA)

Response: *The regulation outlines the requirement that the permittee provide some demonstration that either a solicitation generated no response, or that a review of the previous year's discharged loads within a tributary led to credits being unavailable.*

4. **Comment:** Regional facilities should not be allowed to generate or transfer credits unless the owner has entirely satisfied the waste load allocation needs of any industry authorized to discharge treated wastewater through a separate outfall subject to the owners' VPDES permit. (Bear Island Paper Company)

Hanover County Department of Public Utilities requested that DEQ not approve the preceding comment on the basis that it was too vague.

Response: *No action taken. Staff believes that the existing permit language provides regional facilities and industries with sufficient regulatory flexibility to meet these allocation needs.*

5. **Comment:** Facilities currently discharging to water bodies currently experiencing local nutrient – related water quality impacts should be required to upgrade their treatment works (as opposed to acquiring credits as a means of achieving compliance with their load limits). (James River Association, Chesapeake Bay Foundation, Donna Wilkins, Linda Centorrino, C.J. Gibbs, Gail Troy, Glenn Miller,

Donna Huggins, Mrs. Jerry Mullinax, Doug Beckmann, Paul Rizzo, Robert Diamond, Andrew Cohen, David Harrington, Lynn Harris, Ms. N.B., Jennifer Dyson, John Ragosta, Joe Lerch, Nina Michael, Elizabeth Gibbs, Tim Gabbert, Lisa Guthrie, Stella Jones, John Bevis, Michael Gildea, Elizabeth Richardson, Gregg Hudson, Catherine Gilliam, Errol Plata, Nancy Lenz, Charlie Loudermilk, Star Womanspirit, Cynthia Wackerbarth, Orv Lehman, Gary Dufur, John Drain, Katie Bidinger, Raymond Helm, Marion M. MacRae, Barry O'Keefe, Charles Denny, Rita Costello, Carl Abramson, Richard Carpenter, Elaine Shaw, Marcus Walther, Mark Endries, Paul DiMarco, Jill Hoehlein, James Gibson, Sheryl Smith, Rachel Olson, Kayce Cover, Audrey Clement, Philip Prisco, Myron Drewniak, Jim Wharry, Patricia Wharry, Fletcher Stevens, Mark Zimmerman, Diana Parker, Robert Dawson, Andrew Carter, Patricia Churchman, Warren G, Charles Creighton, Todd Green, James Boissonnault, Sarah Sinsabaugh, Carol Warren, Louis Schiavo, Claire Wyngaard, Trent Richardson, Willie Mills, Susan Porter Beffel, Charles Wight, Brian Glover, Howard Urbach, Teos Abadia, Robin Curtis, Marjorie Streeter, Helen Sanders, Clemans Powell, Thomas McKillop, Andrea Leonard, Barbara Williams, Miriam Riggs, John Reeves, Karen Fedorov, Carl Little, Doreen Thompson, Carrie Wortham, Dana Cook, Jennifer Hollar, Frank Witt, James Connor, Brian Moores, Patricia Kurpiel, Sandra Davis, Elizabeth-Reid Becker, William V. Brierre Jr., Thomas Fore, Janet Worsham, Gessica Coolness, Dr. R. Chris Jones)

Response: *No action taken. Staff believes the regulation, as drafted, is sufficiently stringent to protect local water quality.*

6. **Comment:** Facilities should be required to acquire credits or load allocations as close to their discharge (preferably upstream or in the headwaters of the same tributary basin) as possible (Piedmont Environmental Council)

Response: *No action taken. Staff believes the regulation, as drafted, is sufficiently stringent to protect local water quality.*

7. **Comment:** Facilities should not be allowed to trade with dischargers in other tributaries, or to exchange credits in those cases where they have multiple-tributary discharge permits (Richard Carpenter)

Other commenters (Merck) requested the ability to conduct inter-basin trading.

Response: *No action taken. Staff believes the regulation, as drafted, is sufficiently stringent to protect local water quality. The enabling legislation prohibits inter-basin trading.*

8. **Comment:** Some effort should be made to limit smaller-scale use of nutrients (e.g., lawn fertilizer) or consumer water conservation (Constance Hartke, Claire Wyngaard)

Response: *No action taken. The general permit is intended to address large scale point source dischargers of nutrients; it is possible that some permittees may work with smaller nutrient users in an overall effort to reduce a community's nutrient impact on state waters.*

9. **Comment:** DEQ must annually compile, provide public notice and request comment, and seek SWCB approval of all completed trades/allocations (Chesapeake Bay Foundation)

Response: *No action taken. Staff believes the regulation, as drafted, is sufficiently stringent to protect water quality. The enabling legislation requires DEQ to establish and operate an auditing program which should achieve the benefits envisioned by the commenter.*

10. **Comment:** DEQ should allow point-nonpoint trading for compliance credit acquisition (in addition to offsetting new or expanded discharges) (Colonial SWCD, Hampton Roads Planning District Commission)

Response: *No action taken. The enabling legislation does not provide for this form of nutrient exchange.*

11. **Comment:** Payment into the WQIF should be an option of last resort (Environmental Banc & Exchange)

Response: *No action required. Staff believes the regulation, as drafted, accomplishes this.*

12. **Comment:** Unused point source allocations (from facilities that have allocations but have not been constructed) should not be held by DEQ for sale as compliance credits (Chesapeake Bay Nutrient Land Trust, VMA, Smurfit-Stone, R.J. Reynolds, VAMWA, Alexandria Sanitation Authority, Prince William County Service Authority, Rapidan Service Authority, Harrisonburg-Rockingham Regional Sewer Authority, Hopewell Regional Wastewater Treatment Facility, Frederick-Winchester Service Authority, South Central Wastewater Authority, Upper Occoquan Sewage Authority, Hanover County Department of Public Utilities, Loudoun County Sanitation Authority, City of Lynchburg Department of Utilities, Spotsylvania County, City of Richmond Department of Public Utilities, Hampton Roads Sanitation District)

Response: *No action taken. Staff believes this provides an initial source of pounds for the WQIF to trade, with payments received being promptly applied to point source or non-point source reductions in the same tributary, as required by the enabling legislation. It also serves as an incentive for the facilities to whom those allocations were originally assigned to undertake facility construction in a timely manner. This condition does not affect existing facilities that have successfully reduced or eliminated nutrient discharges, and it should not be construed as doing so.*

13. **Comment:** Facilities whose mass loads are derived from permitted design capacities should be eligible to generate credits (VMA, R.J. Reynolds, Hampton Roads Sanitation District, Louisa County Water Authority, Amelia County)

Response: *The enabling legislation permits only a limited category of facilities with waste load allocations in Subsection C of Sections 50, 60, 70, 110 and 120 of the Water Quality Management Planning Regulation (9 VAC 25-720) as of January 11, 2006 to generate and sell credits, as these are the only facilities who are required by law to register for general permit coverage by January 1, 2007, and are the only facilities subject to water quality based mass load limits and associated schedules of compliance. The trading concept exists primarily to provide these facilities a market-based alternative to construction of improved treatment works. Facilities that become subject to this permit by expansion are subject to a technology-based load limit (the permitted design capacity) and are not immediately subject to as stringent treatment technology requirements; while they may acquire credits, they cannot generate them, because they are not required to reduce their existing waste loads. The language in the regulation has been changed to more accurately describe this.*

Owners or operators of multiple facilities in the same tributary who aggregate the discharges at a single regional plant are provided the option of trading to the extent that additional treatment is required to be installed in order to meet the aggregated allocation (i.e., facilities subject to the schedule of compliance will have to install more rigorous treatment to accommodate the additional flows, while a new facility taking on the aggregate flows of several non-significant dischargers may not have to, if it can show that

such construction is not necessary to meet the aggregated load limit). The existing permit language delineates this.

However, owners or operators of multiple facilities in the same tributary who aggregate the discharges under common registration (as opposed to regionalization) already have a de facto trading program among the facilities involved, which could result in a significant discharger receiving "credits" from a non-significant discharger under common ownership. Such arrangements can only generate credits if the aggregate discharge from all of the "bubbled" facilities is less than the aggregate waste load allocation (from facilities listed in Subsection C of Sections 50, 60, 70, 110 and 120 of the Water Quality Management Planning Regulation (9 VAC 25-720) as of January 11, 2006).

14. **Comment:** Facilities with the ability to generate compliance credits by implementing non-point best management practices on site should be permitted to do so (VMA, Merck, Honeywell, R.J. Reynolds, Coors)

Response: *The enabling legislation does not permit the application of non-point load reductions to compliance with the annual load limit.*

15. **Comment:** The language that enables POTWs to implement trading programs among their industrial users should be retained (VMA, Virginia Pretreatment Group, Smurfit-Stone, Honeywell, R.J. Reynolds)

Response: *No action required; the aforementioned language will be kept in the permit.*

16. **Comment:** The registration list contains several facilities with delivery factors in excess of 1.00. While this may have been an effective tool in calibrating the Chesapeake Bay model, it is difficult to reconcile with the trading program when "delivered pounds" are the units in question. No delivery factor should exceed 1.00. (VAMWA, Alexandria Sanitation Authority, Prince William County Service Authority, Rapidan Service Authority, Harrisonburg-Rockingham Regional Sewer Authority, Hopewell Regional Wastewater Treatment Facility, Frederick-Winchester Service Authority, South Central Wastewater Authority, Upper Occoquan Sewage Authority, Hanover County Department of Public Utilities, Loudoun County Sanitation Authority, City of Lynchburg Department of Utilities, Spotsylvania County, City of Richmond Department of Public Utilities, Hampton Roads Sanitation District)

Response: *The Chesapeake Bay model accounted for phosphorus contained in legacy sediment loads in the tributaries, which resulted in the delivery factors greater than 1.00. DEQ recognizes that this application is inapplicable to point source dischargers and will revise the registration list to cap delivery factors at 1.00.*

17. **Comment:** Individual facilities under an aggregate Waste Load Allocation are in compliance when the aggregate WLA is achieved. The permit language should reflect this. (VAMWA, Alexandria Sanitation Authority, Prince William County Service Authority, Rapidan Service Authority, Harrisonburg-Rockingham Regional Sewer Authority, Hopewell Regional Wastewater Treatment Facility, Frederick-Winchester Service Authority, South Central Wastewater Authority, Upper Occoquan Sewage Authority, Hanover County Department of Public Utilities, Loudoun County Sanitation Authority, City of Lynchburg Department of Utilities, Spotsylvania County, City of Richmond Department of Public Utilities, Hampton Roads Sanitation District, Hampton Roads Planning District Commission)

Response: *The owner or operator of multiple facilities located in a single tributary, when opting to aggregate the load limits of these facilities, will register them under one general permit number.*

Compliance with the aggregate limit will be reckoned with respect to the owner/operator and not with the individual facilities; the permit language has been modified to make this more explicit.

18. **Comment:** Only existing facilities should be able to acquire compliance credits through the WQIF. (Hampton Roads Planning District Commission)

Response: *No action taken. Any facility that discharges more than its load limit, AND can demonstrate that it has diligently attempted to acquire credits from another point source in the tributary, can acquire credits from the WQIF, assuming that the WQIF has any credits to sell from that tributary.*

K. General Permit (9 VAC 25-820-70), Part II.B., Acquisition of Waste Load Allocations

1. **Comment:** Requested clarification of development of offsets "as may be approved by the Department on a case-by-case basis". (EPA)

Response: *No action taken. The enabling legislation contemplated that in the future some previously unforeseen means of offsetting increased nutrient loads might be developed and submitted to the Department. It would be impossible at this point to anticipate the approval criteria for such technology or practice.*

2. **Comment:** Offset allocations acquired through WQIF should be generated in the same calendar year, that trading is "pounds for pounds", and that WQIF transactions should be subject to conditions similar to those for permitted facilities. (EPA, James River Association)

Response: *No action required. Such policies are already established in the regulation.*

3. **Comment:** Requested information on how cost of offset allocations from WQIF was determined. (EPA)

Response: *The enabling legislation established the bases by which the cost of credits is to be calculated.*

4. **Comment:** DEQ should remove the acquisition of load reductions from non-point best management practices until the practice is better defined in the general permit. (Piedmont Environmental Council)

Response: *No action taken. See responses to following comments.*

5. **Comment:** DEQ should subject the development of point-nonpoint trading practices to public input from stakeholders, preferably with an expanded version of the Technical Advisory Committee used for the development of the general permit regulation (Piedmont Environmental Council, Dr. R. Chris Jones, James River Association, Chesapeake Bay Foundation, Colonial SWCD)

Response: *DEQ and DCR are identifying potential members of such a workgroup and intend to continue the process of developing point-nonpoint trading for the foreseeable future.*

6. **Comment:** Non-point source baselines (to be fulfilled before a landowner is eligible to sell load reductions) should be placed in the general permit. (Piedmont Environmental Council, James River Association, Chesapeake Bay Foundation)

Response: *No action taken. These baselines will be provided through guidance developed by DEQ and DCR, in a process involving stakeholders and subject to a public comment period.*

7. **Comment:** Only best management practices that have been demonstrated to achieve greater reductions than already required by state or federal requirements or by the tributary strategies should be credited as a non-point source allocation. (Piedmont Environmental Council), with the recognition that the tributary strategy process was never based on allocations that were balanced among individual landowners. (Colonial SWCD)

Response: *No action taken, as this is already required under the general permit.*

8. **Comment:** Virginia should establish a certification and approval process for all private entities to ensure the benefits of allocations are adequately calculated and recognized (Piedmont Environmental Council, James River Association, Chesapeake Bay Foundation, Colonial SWCD, Environmental Banc & Exchange)

Response: *DEQ and DCR are working on such a certification/approval process. It should be recognized that while the enabling legislation is silent on how the private/public entity acting on behalf of the landowner is identified, regulated or otherwise governed, the VPDES permittee will retain liability for compliance in any process developed by DEQ and DCR.*

9. **Comment:** Point-nonpoint trades should be subject to binding legal agreements in order for DEQ to pursue enforcement actions if allocations fail to meet desired outcomes (Piedmont Environmental Council, Chesapeake Bay Foundation, Environmental Banc & Exchange)

Other commenters requested that permittees not bear the liability for acts or omissions of third parties (VAMWA, Alexandria Sanitation Authority, Prince William County Service Authority, Rapidan Service Authority, Harrisonburg-Rockingham Regional Sewer Authority, Hopewell Regional Wastewater Treatment Facility, Frederick-Winchester Service Authority, South Central Wastewater Authority, Upper Occoquan Sewage Authority, Hanover County Department of Public Utilities, Loudoun County Sanitation Authority, City of Lynchburg Department of Utilities, Spotsylvania County, City of Richmond Department of Public Utilities, Hampton Roads Sanitation District)

Response: *The VPDES permit holder will retain liability for compliance with the load limit, but the enabling legislation is silent on the contractual mechanisms by which the trades occur. VPDES permit holders are already liable for the acts or omissions of third parties (contract laboratories or contract wastewater facility operators), and are free to exercise due diligence in selecting offset options.*

10. **Comment:** Payments into the WQIF should be kept separate from other activities already funded by WQIF and should be promptly applied to on-the-ground cleanup (Piedmont Environmental Council, Chesapeake Bay Foundation, Environmental Banc & Exchange, Chesapeake Bay Nutrient Land Trust)

Response: *No action required as the enabling legislation already requires this of DEQ.*

11. **Comment:** Trading ratio of 2:1 is too high and doesn't reflect on-site conditions (Environmental Banc & Exchange, Chesapeake Bay Nutrient Land Trust, Department of the Navy, Mid-Atlantic Region, VAMWA, Alexandria Sanitation Authority, Prince William County Service Authority, Rapidan Service Authority, Harrisonburg-Rockingham Regional Sewer Authority, Hopewell Regional Wastewater Treatment Facility, Frederick-Winchester Service Authority, South Central Wastewater Authority, Upper Occoquan Sewage Authority, Hanover County Department of Public Utilities, Loudoun County Sanitation Authority, City of Lynchburg Department of Utilities, Spotsylvania County, City of Richmond Department of Public Utilities, Hampton Roads Sanitation District)

Response: *No action required; the ratio corresponds with the cost calculation method dictated by the enabling legislation for offset payments to the WQIF and can be modified in coming years should the underlying science behind non-point reductions dictate accordingly.*

12. **Comment:** Payment into the WQIF should be an option of last resort (Environmental Banc & Exchange)

Response: *No action required. Staff believes the regulation, as drafted, accomplishes this.*

13. **Comment:** The cost formula used to determine payment into the WQIF should only factor in the most cost-effective practices funded by DCR to meet the non-point tributary strategy goals (Coors)

Response: *DEQ and DCR will consider this while developing implementation guidance.*

14. **Comment:** Individual facilities under an aggregate Waste Load Allocation are able to offset their new or expanded discharges of nutrients by operating under the aggregate limit. The permit language should reflect this. (VAMWA, Alexandria Sanitation Authority, Prince William County Service Authority, Rapidan Service Authority, Harrisonburg-Rockingham Regional Sewer Authority, Hopewell Regional Wastewater Treatment Facility, Frederick-Winchester Service Authority, South Central Wastewater Authority, Upper Occoquan Sewage Authority, Hanover County Department of Public Utilities, Loudoun County Sanitation Authority, City of Lynchburg Department of Utilities, Spotsylvania County, City of Richmond Department of Public Utilities, Hampton Roads Sanitation District, Hampton Roads Planning District Commission)

Response: *The general permit language has been clarified to reflect this.*

15. **Comment:** Objected to degree that future permit requirements would be determined by DEQ and DCR outside of the regulatory development process, particularly with regard to determination of eligibility of landowners to achieve load reductions, sale of load allocations from the WQIF and conditions on the reporting forms (VAMWA, Alexandria Sanitation Authority, Prince William County Service Authority, Rapidan Service Authority, Harrisonburg-Rockingham Regional Sewer Authority, Hopewell Regional Wastewater Treatment Facility, Frederick-Winchester Service Authority, South Central Wastewater Authority, Upper Occoquan Sewage Authority, Hanover County Department of Public Utilities, Loudoun County Sanitation Authority, City of Lynchburg Department of Utilities, Spotsylvania County, City of Richmond Department of Public Utilities, Hampton Roads Sanitation District)

Response: *DEQ and DCR are working jointly to develop implementation guidance; this process will involve a Technical Advisory Committee or comparable stakeholder workgroup and will be subject to public comment. While DEQ recognizes the need to minimize the imposition of additional conditions outside of the regulatory process, the enabling legislation is silent as to how some of the more critical aspects of the offset process will be achieved. DEQ has developed the regulation, and is proposing to develop the guidance, in a manner that balances the need to for a degree of certainty in a program in its infancy against the need for flexibility in adapting to emerging circumstances and new information.*

L. Conditions applicable to all VPDES Permits

1. Comment: DEQ needs to modify this to eliminate redundant reporting requirements. (VMA, Merck, Smurfit-Stone, R.J. Reynolds, Hampton Roads Sanitation District)

Response: *The regulation was previously reviewed for unnecessary requirements (sludge) and beyond removal of these, no further action is required; nothing prevents the permittee from reporting an incident under a subject header that cites both the individual VPDES permit and the watershed general permit. Since it is possible for multiple individually-permitted facilities under common ownership or operation to be registered under a single general permit, an incident at a single facility may have broader implications for the owner or operator under the general permit.*

M. Implementation of this regulation with 9 VAC 25-40 and 9 VAC 25-720

1. Comment: DEQ needs to clarify that concentration-based limits pursuant to 9 VAC 25-40 will reflect the actual level of treatment achieved by a facility upgrade (VMA, R.J. Reynolds), how the definitions of "Biological Nutrient Removal" and "State-of-the-Art Treatment Technology" will be applied to industry, (Merck, Smurfit-Stone, Honeywell), when concentration-based limits in individual permits will supersede the annual load limit in the general permit, whether the concentration-based limits will effectively reduce the annual load limit (Clifton Forge and Allegheny County) and how reuse/recycling of wastewater will affect the imposition of concentration-based limits (Hampton Roads Sanitation District)

Response: *DEQ will address this in implementation guidance; while it should be recognized that several of these comments reflect more upon 9 VAC 25-40 than upon the proposed general permit regulation, the inclusion of concentration-based limits in the individual permit does not imply that the load limit in the general permit is invalid; it may be that as a result of a facility installing state-of-the-art treatment works, they are subject to a stringent concentration based limit. By complying with this limit, the facility is most likely generating credits because it would be complying with a load limit (that was derived using a higher effluent concentration).*

2. Comment: DEQ needs to clarify the conditions under which an E3/E4 facility may or must operate vis a vis the nutrient regulations that have been promulgated since 2005 (VMA, Smurfit-Stone, Honeywell, R.J. Reynolds, Coors).

Response: *DEQ will address this in implementation guidance; it should be recognized that several of these comments reflect more upon 9 VAC 25-40 than upon the proposed general permit regulation.*

3. **Comment:** Request for additional WLA under 9 VAC 25-720 (City of Fredericksburg, Tyson, Town of Culpeper)

Response: *If and when these requests are approved by the SWCB, the registration list will be modified accordingly (already done for Fredericksburg).*

4. **Comment:** Request for recognition of permitted design capacity for facility that has been taken off line, with the wastewater pumped to another facility under common ownership but discharging in a different tributary. (Spotsylvania County)

Response: *This is possible, but only if the permit for the original facility is maintained.*

All changes made in this regulatory action

Please detail all changes that are being proposed and the consequences of the proposed changes.

Detail new provisions and/or all changes to existing sections.

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9 VAC 25-820-10, Definitions: Incorporates the definitions from *§62.1-44.19:13 of the Code of Virginia*, with some additional language added to clarify some terms. This section contains the following significant new definitions:

> "Offset" means to acquire an annual waste load allocation of total nitrogen or total phosphorus by a new or expanding facility to ensure that there is no net increase of nutrients into the affected tributary of the Chesapeake Bay.
>
> "Permitted design capacity" or "permitted capacity" means the allowable load (pounds per year) assigned to an existing facility that is a non-significant discharger that does not have a waste load allocation listed in Subsection C of Sections 50, 60, 70, 110 and 120 of the Water Quality Management Planning Regulation (9 VAC 25-720) as of January 11, 2006. The permitted design capacity is calculated based on the design flow and installed nutrient removal technology (for sewage treatment works, or equivalent discharge from industrial facilities) at a facility that has either commenced discharge, or has received a Certificate to Construct (for sewage treatment works, or equivalent DEQ approval for discharges from industrial facilities) prior to July 1, 2005. This mass load is used for (i) determining whether the expanding facility must offset additional mass loading of nitrogen and phosphorus and (ii) determining whether the facility must acquire credits at the end of a calendar year. For the purpose of this regulation, facilities that have installed secondary wastewater treatment (intended to achieve BOD and TSS monthly average concentrations equal to or less than 30 milligrams per liter) are assumed to achieve an annual average total nitrogen effluent concentration of 18.7 milligrams per liter and an annual average total phosphorus effluent concentration of 2.5 milligrams per liter. Permitted design capacities for facilities which, before July 1, 2005, were required to comply with more stringent nutrient limits, shall be calculated using the more stringent values.
>
> "Quantification Level (QL)" means the lowest standard in the calibration curve for a given analyte. The QL must have a value greater than zero and be verified each day of analysis by analyzing a sample of known concentration at the selected QL with a recovery range of 70 – 130%.
>
> "Registration list" means a list maintained by the Department indicating all facilities that have registered for coverage under this general permit, by tributary, including their waste load allocations, permitted design capacities and delivery factors as appropriate.

9 VAC 25-820-20, Purpose, delegation of authority: cites enabling legislation for this regulatory action, describes facilities to whom this proposed general permit applies and delegates to the Director the authority to perform any act of the Board provided under this regulation, except as limited by § 62.1-44.14 of the Law.

9 VAC 25-820-30, Relation to Existing VPDES Permits Issued in accordance with 9 VAC 25-31: describes the general permit's superseding of those effluent limits, monitoring requirements and compliance schedules in the facilities' individual permits where these requirements are based upon standards, criteria, waste load allocations, policy, or guidance established to restore or protect the water quality and beneficial uses of the Chesapeake Bay or its tidal tributaries. Also describes where site-specific or local water quality issues may result in the individual permits taking precedence over the general permit.

9 VAC 25-820-40, Compliance Plans: requires the submittal by permittees to DEQ, either individually or through the Virginia Nutrient Credit Exchange Association, plans sufficient to comply with the individual and combined waste load allocations of all the permittees in the tributary as soon as possible. Facilities capable of continued compliance with their individual waste load allocations upon the issuance of this general permit have the option of accepting responsibility for compliance with these waste load allocations immediately, and will be eligible to generate and exchange credits immediately.

9 VAC 25-820-50, Transfer of permit coverage: provides additional requirements to account for the possibility that multiple facilities under common ownership or operation may apply for an aggregated waste load allocation when registering for permit coverage. Transfer of ownership of these facilities must be carefully documented.

9 VAC 25-820-60, Termination of permit coverage: as facilities must hold an individual VPDES permit to be eligible for coverage under this general permit, any termination of the associated individual permit will result in the termination of coverage under this general permit.

9 VAC 25-820-70, General permit: consists of the following requirements:

Part I, Special conditions applicable to all facilities:

A. Authorized activities
    1. Authorization for facilities required to register
    2. Authorization for facilities not required to register

B. Waste load allocations
    1. Allocations in Registration List are enforceable as annual load limits
    2. Multiple facilities under common ownership or operation, discharging to the same tributary, may apply for aggregated allocation
    3. Conditions applying to the consolidation of multiple dischargers into a single regional facility
    4. Allowance for determination of net load from discharger
    5. Allowance for determination of bioavailable load from discharger

C. Schedule of Compliance
    1. Tributary-wide compliance dates
    2. Individual compliance dates

D. Annual update of Compliance Plan (that was required in 9 VAC 25-820-40)

E. Monitoring requirements
    1. Parameters monitored and the frequencies thereof
    2. Requirement to use approved sampling and analytical methods
    3. Requirement pertaining to calculation of loading data
    4. Monthly reporting requirements

F. Annual reporting
    1. Annual loading report, including credits to be acquired or exchanged.

G. Registration requirements and exclusions
    1. Facilities required to register for coverage under this general permit

a. Existing significant dischargers
b. New and expanded facilities with flows ≥40,000 gallons per day or equivalent nutrient load discharged

2. Exclusion of all other categories of dischargers

H. Registration Statement
1. Contents
2. Submittal to DEQ-Office of Water Permit Programs
3. Conditions under which amended registration statement is required

I. Public notice requirements for modified or new waste load allocations or delivery factors
1. Public notice contents
2. Requirement to provide information relevant to activity requiring public notice
3. 30 day public comment period

J. Compliance with Waste Load Allocations
1. Methods of compliance
a. Discharge load less than or equal to Waste Load Allocation
b. Acquire sufficient credits to meet compliance requirements
c. Payment into Water Quality Improvement Fund
2. Conditions under which credits may be exchanged
a. Credit generation and application must be contemporaneous
b. Credits are generated by permitted facilities in the same tributary
c. Credit exchange supports local water quality requirements
d. Credits acquired no later than June 1 immediately following the calendar year in which the credits are applied
e. Credits are generated by constructed (as opposed to proposed) facility
f. Credit acquisition is certified by June 1
3. Credit acquisition from Water Quality Improvement Fund
a. Credit generation and application must be contemporaneous
b. Credits are generated in the same tributary
c. Credit exchange supports local water quality requirements
4. Publicly owned treatment works may develop and implement trading programs among industrial users in accordance with pretreatment regulations and individual permits held by such POTWs.

Part II, Special Conditions Applicable to New and Expanded Facilities:

A. Offsetting mass loads discharged by new and expanded facilities
1. Facilities subject to offset requirements
2. Calculation of "base" load when determining offset requirements
3. Owners/operators of multiple facilities with an aggregated load limit required to offset only those loads in excess of aggregated limit

B. Acquisition of waste load allocations
1. Means of allocation acquisition
a. From existing permitted facilities
b. From non-point source load allocations using a trading ratio of two pounds removed for each pound discharged
(i) Acquired through a public, or private entity acting on behalf of the land

owner
(ii) Calculated using best management practices efficiency rates and attenuation rates approved by the board
(iii) Based on appropriate delivery factors approved by the board
(iv) Demonstrated to have achieved reductions beyond those already required by or funded under federal or state law, or by the Virginia tributaries strategies plans, and
(v) Included as conditions of the facility's individual Virginia Pollutant Discharge Elimination System permit

c. Payment into the Water Quality Improvement Fund
d. Other means as approved by DEQ on case-by-case basis

2. Condition under which allocations may be acquired:
   a. Allocation generation and application must be contemporaneous
   b. Allocations are generated in the same tributary
   c. Allocation acquisition supports local water quality requirements
   d. Allocations are authenticated in accordance with the facility's individual VPDES permit and reported no later than February 1 immediately following the calendar year in which the allocation is applied
   e. Allocations are generated by constructed (as opposed to proposed) facility
   f. Allocation acquisition is certified by June 1 of year prior to proposed application of allocation
3. Priority of allocation acquisition options
4. Acquisition of allocations from Water Quality Improvement Fund

Part III, Conditions Applicable to all VPDES Permits; with exception of conditions that would have no applicability to this general permit (e.g., biosolids handling and reporting), these conditions are comparable to those in all other VPDES permits, including general permits.

Regulatory Flexibility Analysis

Please describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) the establishment of less stringent compliance or reporting requirements; 2) the establishment of less stringent schedules or deadlines for compliance or reporting requirements; 3) the consolidation or simplification of compliance or reporting requirements; 4) the establishment of performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the proposed regulation.

This proposed general permit complements the previously approved amendments to 9 VAC 25-40 (the Regulation for Nutrient Enriched Waters and Dischargers within the Chesapeake Bay Watershed) and to 9 VAC 25-720 (the Water Quality Management Planning Regulation) and is intended to provide compliance flexibility to the affected facilities in order to ensure the most cost-effective nutrient reduction technologies are installed within the respective tributary watersheds. This proposed regulation should not impose any additional compliance costs upon regulated entities above and beyond those already imposed by the aforementioned regulatory amendments, and is intended to provide an alternative means of compliance in order to save the regulated entities money.

127 facilities will initially be affected by this proposed regulation, most of which are publicly owned treatment works or large industrial facilities. One facility (J.H. Miles) is categorized as a small business. In the future, certain smaller new or expanded dischargers are required to register for general permit coverage in accordance with §62.1-44.19:14 C.5 and §62.1-44.19:15 of the Code of Virginia as amended in the 2005 session of the General Assembly. These facilities would also be subject to 9 VAC 25-40 (The Regulation for Nutrient Enriched Waters and Dischargers within the Chesapeake Bay Watershed); again, this proposed general permit should provide these new or expanding facilities compliance flexibility.

Family impact

Please assess the 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 a watershed VPDES general permit for the discharge of total nitrogen and total phosphorus from wastewater treatment plants is for the protection of public health and safety and the environment. In the short term, the adoption of this general permit may increase the cost of wastewater treatment, thereby increasing the user charges paid by residential and commercial customers, potentially decreasing the disposable family income. However, as facilities subject to this permit begin to modify their wastewater treatment facilities in response to market forces, it is possible that the cost of wastewater treatment may decrease in the long term. In any event, this market-based program should have less impact on the family than would a traditional regulatory approach to nutrient reduction.