

# MEMORANDUM

## State Water Control Board

2111 North Hamilton Street

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**SUBJECT:** OWRM Guidance Memo No. 90-011  
Interpretation of Nutrient Policy

**TO:** Regional Directors

**FROM:**  Larry G. Lawson, Director through  Martin G. Ferguson, Jr.,  
Permits Program Manager

**DATE:** April 20, 1990

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Since we have been implementing VR 680-14-02 Policy for Nutrient Enriched Waters (attached), several questions have arisen regarding interpretation of the policy when applying it to the VPDES permits program. The purpose of this memorandum is to provide permitting guidance and interpretation of certain aspects of the policy. The following is a list of some common questions and our guidance.

Question 1: If a municipal STP expands their facility from a design flow of less than 1.0 MGD to a design flow of equal to or greater than 1.0 MGD, does the Nutrient Policy apply?

Answer: Yes, the policy should be applied to this permit. This permittee should be required to meet an effluent limit of 2 mg/l for Total Phosphorous upon start-up on the expanded facility.

Question 2: If an existing municipal STP expands by .05 MGD or greater, does the policy apply?

Answer: Yes, if any expansion results in a design flow of .05 MGD or greater, then the policy should be applied.

Question 3: How is the phrase "authorized to discharge 1 MGD or more" interpreted in regards to industrial facilities?

Answer: This phrase is interpreted to apply to the long term average flow of any and all discharges of wastewater from industrial facilities. This long term average is generally for a period not less than one year, and not more than five years or not more than a time period beyond which process, production, or wastewater treatment modifications altered flow levels.

Example:

An industry has operated for 3 years with an average flow of .75 MGD per month. In the fourth year they expand production and discharge 1.1 MGD per month. The policy would apply.

Question 4: An industrial facility has more than one outfall. How is the policy applied?

Answer: The policy is to be applied to each outfall that has a long term average flow of 1.0 MGD or greater. If no outfalls have long term average flows of 1.0 MGD or greater, then the policy does not apply to that permit.

Question 5: How are the nutrient limits to be incorporated into permits?

Answer: For **municipal** permits the Phosphorous limit (and Nitrogen limit where applicable) is to be listed as a monthly average concentration with associated monthly average mass loadings based on design flow. No weekly average values are necessary. For **industrial** permits, the applicable limit is to be listed as a monthly average concentration with associated monthly average mass loadings based on the long term average flow. No daily maximum values are necessary. For **non-contact cooling water** discharges, and for discharges that are significantly influenced by stormwater, include monthly average concentration limits, but no mass limits are necessary.

Question 6: If a permit is issued with nutrient limits as concentration and quantity and in the future the permittee requests that the quantity limits be increased based on flow increases, can we increase the quantity limits?

Answer: Our interpretation of the nutrient policy is that we wish to hold the line on discharges of nutrients into nutrient enriched waters. Therefore, the permit modification would not increase the quantity limits, and the concentration limits would be made more stringent based on the revised higher flow to yield the same quantity limits.

COMMONWEALTH OF VIRGINIA  
STATE WATER CONTROL BOARD

VR 680-14-02 - POLICY FOR NUTRIENT ENRICHED WATERS

[Adopted: March 28-29, 1988 - Effective: May 25, 1988.]

§ 1. Purpose.

This policy provides for the control of discharges of nutrients from point sources affecting state waters that have been designated "nutrient enriched waters" in VR 680-21-07.03.

§ 2. Authority.

The Board has adopted this policy under the authority of §§ 62.1-44.15(3), 62.1-44.15(10) and 62.1-44.15(14) of the Code of Virginia.

§ 3. Strategy for "nutrient enriched waters".

As specified herein, the board shall reopen the NPDES permits of certain point source dischargers to "nutrient enriched waters" and shall impose effluent limitations on nutrients in the discharges authorized by those permits and certain new permits.

A. 1. All dischargers authorized by NPDES permits issued on or before July 1, 1988, to discharge 1 MGD or more to "nutrient enriched waters" shall be required to meet a monthly average total phosphorus effluent limitation of 2 mg/l as quickly as possible and in any event within 3 years following modification of the NPDES permit.

2. At the time of modification of the NPDES permit, any discharger who voluntarily accepts a permit to require installation and operation of nitrogen removal facilities to meet a monthly average total nitrogen effluent limitation of 10 mg/l for the months of April through October shall be allowed an additional year to meet the phosphorus effluent limitation in § 3 A.1.

B. All new source dischargers as defined in Regulation 6 with a permit issued after July 1, 1988 and a design flow greater than or equal to 0.05 MGD who propose to discharge to "nutrient enriched waters" shall be required to meet a monthly average total phosphorus effluent limitation of 2 mg/l.

C. This policy shall not be construed to relax any effluent limitation concerning a nutrient that is imposed under any other requirement of state or federal law. No time extensions outlined in § 3 A.2 for installation and

operation of nitrogen removal facilities shall be granted to a discharger if such an effluent limitation or a time extension is already imposed under any other requirement of state or federal law or regulation.

§ 4. Whenever the board determines that a permittee has the potential for discharging monthly average total phosphorus concentrations greater than or equal to 2 mg/l or monthly average total nitrogen concentrations greater than or equal to 10 mg/l to "nutrient enriched waters," the board may reopen the NPDES permit to impose monitoring requirements for nutrients in the discharge.

§ 5. The board anticipates that, following implementation of the foregoing requirements and evaluation of effects of this policy and of the results of the non-point source control programs, further limitations on discharges of phosphorus or of other nutrients may be necessary to control undesirable growths of aquatic plants.

§ 6. The board may entertain petitions from adjoining states to consider rulemakings to control nutrients entering tributaries to "nutrient enriched waters" of the adjoining state.