

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER DIVISION

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SUBJECT: Guidance Memo No. 11-2002
Assessing points for violations of Chesapeake Bay annual load and concentration limitations for Total Nitrogen and Total Phosphorus

TO: Regional Directors

FROM: Ellen Gilinsky, Ph.D., Director 

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COPIES: Deputy Regional Directors, Regional Water Compliance Managers, James Golden, Rick Weeks, Melanie Davenport, Kathleen OConnell, Fred Cunningham, Allan Brockenbrough

Summary:

The purpose of this guidance is to establish point assessment criteria for effluent violations of the annual load and concentration limitations for Total Nitrogen (TN) and Total Phosphorus (TP) in the watershed general permit and individual VPDES permits. This guidance will be rescinded when the relevant section of the Compliance Auditing Manual (Guidance Memo #02-2010) is updated.

Electronic Copy:

An electronic copy of this guidance in PDF format is available for staff internally on DEQNET, and for the general public on DEQ's website at: <http://www.deq.virginia.gov>.

Contact information:

Please contact Lily Choi, Office of Water Permits and Compliance Assistance, at (804) 698-4054 or Lily.Choi@deq.virginia.gov with any questions regarding the application of this guidance.

Disclaimer:

This document is provided as guidance and, as such, sets forth standard operating procedures for the agency. However, it does not mandate any particular method nor does it prohibit any particular method for the analysis of data, establishment of a wasteload allocation, or establishment of a permit limit. If alternative proposals are made, such proposals should be reviewed and accepted or denied based on their technical adequacy and compliance with appropriate laws and regulations.

Assessing points for violations of Chesapeake Bay annual load and concentration limitations for Total Nitrogen and Total Phosphorus

Annual load limits

Annual nutrient load limitations are the primary tool used to ensure that point sources comply with the Chesapeake Bay TMDL. Annual (calendar year) TN (parameter codes 792, 833 and 842) and TP (parameter codes 794, 836 and 845) load limits with an effective date of January 1, 2011 are included in the watershed general permit (note that a limited number of dischargers accepted one or both limits on an earlier schedule). This permit allows for trading of compliance credits to provide dischargers additional flexibility in meeting their nutrient reduction requirements. As of April 1st of each year, DEQ's OWPCA publishes an annual discharge report listing TN and TP loads from all the facilities covered by the general permit in the previous calendar year. The dischargers then have two months (until June 1st) to complete any trades and notify DEQ. By July 1st, OWPCA will publish an annual load compliance report listing trades of compliance credits and identify dischargers that are in excess of their annual load limit. For any facility that discharged in excess of its annual load limit, compliance cannot be determined until the OWPCA publishes this annual load compliance report the following July 1st. The Compliance Auditors (CAs) should review the annual load compliance report and enter the violations into the CEDS Violation Screen for the previous December. Since the annual load limit is the primary tool for enforcement of the Chesapeake Bay TMDL, the limit addresses 12 months of discharge and the permittee has been given an opportunity to comply via trading, all violations are assessed 4 points (see Point Assessment Criteria (i) below) and result in issuance of an NOV. The CEDS data entry and issuance of NOVs should be done in a timely manner. OWPCA is designing a compliance credit function to be added to the CEDS DMR screen prior to start of the first trading season in April 2012.

Note that there are a small number of individual VPDES permits with interim annual load limits that apply through 2010. Violations of these limits are not subject to trading provisions in the watershed general permit and it is recommended that points be assessed for these violations on a case-by-case basis.

Annual concentration limits

Annual concentration limits are included in individual VPDES permits where nutrient control equipment has been installed. Like the annual load limits, these are calendar year limits that are assessed once per year. Points assessed for annual concentration limits are less stringent than those assessed for annual load limits because they act as a secondary tool ensuring compliance with the Chesapeake Bay TMDL. Since trading does not affect annual concentration limitations evaluation of compliance for annual concentration limits should occur with the submittal of the December DMR. Until the points program is updated in CEDS, the CAs should review each December Violation Summary Report for the individual VPDES permits after the points program run, and assess/adjust the points for violations of the annual average concentration limits for TN (parameter codes 792 and 803) and TP (parameter codes 794 and 811) according to the Point Assessment Criteria (ii) and (iii) below. The WLs/NOVs should be sent in a timely manner.

Point Assessment Criteria

Nutrients (Total Phosphorus and Total Nitrogen)

- (i) Value greater than Annual Load Limit without sufficient credits obtained (Major and Minor) 4
- (ii) Value equal to or greater than 1.2 x Annual Concentration Limit
 - Major.....4
 - Minor2
- (iii) Value less than 1.2 x Annual Concentration Limit
 - Major2
 - Minor1

Additional consideration of annual concentration limits at facilities participating in the Virginia Environmental Excellence Program (VEEP)

The Board’s Regulation for Nutrient Enriched Waters and Dischargers within the Chesapeake Bay Watershed (9 VAC 25-40-70.B) allows for approval of an alternate compliance method for the annual nutrient concentration limits for facilities participating in VEEP at an Exemplary Environmental Enterprise (E3) or an Extraordinary Environmental Enterprise (E4) level. In an effort to standardize alternative compliance methods for such facilities, DEQ has included the following special condition in each VPDES permit with annual average nutrient concentration limits:

The annual average concentration limitations for Total Nitrogen and/or Total Phosphorus are suspended during any calendar year in which the facility is considered by DEQ to be a participant in the Virginia Environmental Excellence Program in good standing at either the Exemplary Environmental Enterprise (E3) level or the Extraordinary Environmental Enterprise (E4) level, provided that the following conditions have also been met:

- a. *The facility has applied for (or renewed) participation, been accepted, maintained a record of sustained compliance and submitted an annual report according to the program guidelines;*
- b. *The facility has demonstrated that they have in place a fully implemented environmental management system (EMS) with an alternative compliance method that includes operation of installed nutrient removal technologies to achieve the annual average concentration limitations, and*
- c. *The E3/E4 designation from DEQ and implementation of the EMS has been in effect for the full calendar year.*

The annual average concentration limitations for Total Nitrogen and/or Phosphorus, as applicable, are not suspended in any calendar year following a year in which the facility failed to achieve the annual average concentration limitations as required by b. above.

In the event that an annual nutrient concentration limit is exceeded, the CA should first consult the VEEP website (<http://www.deq.virginia.gov/veep/>) to determine if the discharger is an E3 or E4 participant. If so, the CA should contact the VEEP coordinator to determine whether the discharger met conditions a – c of the above special condition. If conditions a – c were met and the discharger met all annual nutrient concentration limitations in effect in the calendar year preceding the year being evaluated then no points should be assessed for the violation of the TN and/or TP annual concentration limit.