

CHAPTER 96. WATER QUALITY STANDARDS IMPLEMENTATION

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Authority

The provisions of this Chapter 96 issued under sections 5(b)(1) and 402 of The Clean Streams Law (35 P.S. §§ 691.5(b)(1) and 691.402); and section 1920-A of The Administrative Code of 1929 (71 P.S. § 510-20), unless otherwise noted.

Source

The provisions of this Chapter 96 adopted November 17, 2000, effective November 18, 2000, 30 Pa.B. 6059, unless otherwise noted.

Cross References

This chapter cited in 25 Pa. Code § 16.21 (relating to acute and chronic protection); 25 Pa. Code § 16.22 (relating to criteria development); 25 Pa. Code § 86.6 (relating to extraction of coal incidental to government-financed construction or government-financed reclamation projects); 25 Pa. Code § 87.102 (relating to hydrologic balance: effluent standards); 25 Pa. Code § 88.92 (relating to hydrologic balance: effluent standards); 25 Pa. Code § 88.187 (relating to hydrologic balance: effluent standards); 25 Pa. Code § 88.292 (relating to hydrologic balance: effluent standards); 25 Pa. Code § 89.52 (relating to water quality standards, effluent limitations and best management practices); 25 Pa. Code § 90.102 (relating to hydrologic balance: water quality standards, effluent limitations and best management practices); 25 Pa. Code § 92a.2 (relating to definitions); 25 Pa. Code § 92a.11 (relating to other chapters applicable); 25 Pa. Code § 92a.12 (relating to treatment requirements); 25 Pa. Code § 93.4 (relating to Statewide water uses); 25 Pa. Code § 93.7 (relating to specific water quality criteria); 25 Pa. Code § 93.8a (relating to toxic substances); 25 Pa. Code § 93.9 (relating to designated water uses and water quality criteria); and 25 Pa. Code § 95.10 (relating to treatment requirements for new and expanding mass loadings of Total Dissolved Solids (TDS)).

§ 96.1. Definitions.

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

Concentration—The amount of a substance, expressed in mass units, in a unit volume of water or wastewater.

Conservative substance—A pollutant that undergoes no or minimal transformation or decay in a water system, except by dilution.

Cumulative loading—The sum of pollutant loadings from individual pollutant sources.

Factor of safety—A margin to take into account uncertainty concerning the relationships between effluent limitations and water quality.

Harmonic mean flow—The flow that is determined by taking the reciprocal of the arithmetic mean of reciprocals of daily flow values.

LA—Load allocation—The portion of a surface water's loading capacity that is assigned or allocated to existing and future nonpoint sources and natural quality.

Lake, pond or impoundment—A surface water with a hydraulic residence time of 14 days or more based on average annual daily stream flow. Residence

time shall be determined at average annual daily stream flow and normal pool volume. In the absence of actual records, an average annual daily discharge rate of 1.5 CFS per square mile shall be used.

Loading capacity—The greatest amount of loading that a surface water can receive without violating a water quality standard.

Margin of safety—The portion of a surface water's loading capacity that is set aside to account for uncertainty about the relationship between pollutant loadings and resulting surface water quality, including any uncertainty or imprecision in mathematical models used to determine these relationships. For nonconservative substances, any imprecision or uncertainty concerning the mechanisms by which the substance decays or is transformed shall be considered.

Mass load—The pollutant loading expressed in units of mass per unit time.

NPDES or National Pollutant Discharge Elimination System Permit—A permit issued under Chapter 92 (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance) for the discharge or potential discharge of pollutants from a point source to surface waters.

Natural quality—The water quality conditions that exist or that would reasonably be expected to exist in the absence of human related activity.

Nonconservative substance—A pollutant whose concentration in the water column changes as a result of volatilization, photolysis, hydrolysis, biodegradation, transformation, or other processes, except dilution.

Nonpoint source—A pollutant source which is not a point source discharge.

Nonpoint source restoration plan—A nonpoint source management plan which describes needed actions to restore and improve water quality in a watershed or stream.

Point source discharge—A pollutant source regulated under the NPDES permit system as defined in § 92.1 (relating to definitions).

Pollutant—Any contaminant or other alteration of the physical, chemical, biological, or radiological integrity of surface water which causes or has the potential to cause pollution as defined in section 1 of The Clean Streams Law (35 P. S. § 691.1).

Potable water supply—A water source that is used by humans after conventional treatment for drinking, culinary and other purposes such as inclusion in food products.

Q7-10 flow—The actual or estimated lowest 7 consecutive-day average flow that occurs once in 10 years for a stream with unregulated flow, or the estimated minimum flow for a stream with regulated flow.

Q30-10 flow—The actual or estimated lowest 30 consecutive-day average flow that occurs once in 10 years for a stream with unregulated flow, or the estimated 30 day average minimum flow for a stream with regulated flow.

Reserve factor—A portion of the effluent flow held to provide for projected future wasteloads.

Surface waters—Perennial and intermittent streams, rivers, lakes, reservoirs, ponds, wetlands, springs, natural seeps and estuaries, excluding water at facilities approved for wastewater treatment such as wastewater treatment impoundments, cooling water ponds, and constructed wetlands used as part of a wastewater treatment process.

TMDL—Total maximum daily load—The sum of individual waste load allocations for point sources, load allocations for nonpoint sources and natural quality and a margin of safety expressed in terms of mass per time, toxicity or other appropriate measures.

WLA—Wasteload allocation—The portion of a surface water's loading capacity that is allocated to existing and future point source discharges.

WQBEL—Water quality based effluent limitation—An effluent limitation based on the need to attain or maintain the water quality criteria and to assure protection of existing and designated uses.

Water quality criteria duration—The averaging period associated with a water quality criterion.

Water quality standards—The combination of water uses to be protected and the water quality criteria necessary to protect those uses.

Wetlands—Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs and similar areas.

§ 96.2. Purpose.

The purpose of this chapter is to establish the process for achieving and maintaining water quality standards.

§ 96.3. Water quality protection requirements.

- (a) Existing and designated surface water uses shall be protected.
- (b) Antidegradation requirements in §§ 93.4a—93.4d and 105.1, 105.15, 105.17, 105.18a, 105.20a and 105.451 shall apply to surface waters.
- (c) To protect existing and designated surface water uses, the water quality criteria described in Chapter 93 (relating to water quality standards), including the criteria in §§ 93.7 and 93.8a(b) (relating to specific water quality criteria; and toxic substances) shall be achieved in all surface waters at least 99% of the time, unless otherwise specified in this title. The general water quality criteria in § 93.6 (relating to general water quality criteria) shall be achieved in surface waters at all times at design conditions.
- (d) As an exception to subsection (c), the water quality criteria for total dissolved solids, nitrite-nitrate nitrogen, phenolics, chloride, sulfate and fluoride established for the protection of potable water supply shall be met at least 99%

of the time at the point of all existing or planned surface potable water supply withdrawals unless otherwise specified in this title.

(e) When a water quality criterion described in Chapter 93, including the criteria in §§ 93.7 and 93.8a(b), cannot be attained at least 99% of the time due to natural quality, as determined by the Department under § 93.7(d) based on water quality observations in that waterbody or at one or more reference stations of similar physical characteristics to the surface water, the natural quality that is achieved at least 99% of the time shall be the applicable water quality criterion for protection of fish and aquatic life.

(f) When the minimum flow of a stream segment is determined or estimated to be zero, applicable water quality criteria shall be achieved at least 99% of the time at the first downstream point where the stream is capable of supporting existing or designated uses.

(g) Functions and values of wetlands shall be protected pursuant to Chapters 93 and 105 (relating to water quality standards; and dam safety and waterway management).

Source

The provisions of this § 96.3 amended December 13, 2002, effective December 14, 2002, 32 Pa.B. 6101. Immediately preceding text appears at serial pages (272251) to (272252).

Cross References

This section cited in 25 Pa. Code § 96.4 (relating to TMDLs and WQBELs).

§ 96.4. TMDLs and WQBELs

(a) The Department will identify surface waters or portions thereof that require the development of TMDLs, prioritize these surface waters for TMDL development, and then develop TMDLs for these waters.

(b) The Department will develop WQBELs for point source discharges using applicable procedures described in this chapter when the Department determines that water quality protection requirements specified in § 96.3 (relating to water quality protection requirements) are or would be violated after the imposition of applicable technology based limitations required under sections 301(b), 306, 307 or other sections of the Federal Clean Water Act (33 U.S.C.A. §§ 1311(b), 1316 and 1317) and The Clean Streams Law (35 P. S. §§ 691.1—691.1001) to the point source.

(c) TMDLs and WQBELs shall be developed to meet the requirements of § 96.3.

(d) WLAs developed in accordance with this chapter shall serve as the basis for the determination of WQBELs for point source discharges regulated under Chapter 92 (relating to National Pollutant Discharge Elimination System permit-

ting, monitoring and compliance). When LAs are developed in accordance with this chapter, they shall serve as the basis for the development of nonpoint source restoration plans.

(e) In developing TMDLs and WQBELs, the Department will:

(1) As appropriate consider, relevant design factors, including, but not limited to: water quality criteria duration, flow duration and frequency, natural seasonal variability in water temperature, the natural variability of pH and hardness, the physical characteristics of a watershed, reserve factors, factors of safety and pollutant contributions from other sources.

(2) Treat all pollutants as conservative unless it finds based on scientifically valid information that the substance is not conservative and adequate information is available to characterize the substance's fate or transformation, or both.

(f) The allocation procedure is as follows:

(1) WLAs, LAs and effluent limitations assigned or allocated to individual pollutant sources shall be the more stringent of the following:

(i) The pollutant loading authorized to be discharged under applicable technology-based requirements.

(ii) Where applicable, the pollutant loading determined under §§ 96.5 and 96.6 (relating to nutrient discharges; and heated wastewater discharges).

(iii) The pollutant loading that will achieve the water quality protection requirements specified in § 96.3.

(2) WLAs, LAs and effluent limitations shall be made more stringent if the cumulative loading determined after the application of paragraph (1) does not meet the requirements of § 96.3.

(g) Mathematical modeling at the design flow conditions listed in Table 1 shall be used as applicable to develop TMDLs and WQBELs for point source discharges.

TABLE 1

| <i>Water Quality Criteria</i> | <i>Steady State Design Flow</i> |
|--|---------------------------------|
| Fish and Aquatic Life, Except Ammonia-Nitrogen | Q ₇₋₁₀ |
| Ammonia-Nitrogen | Q ₃₀₋₁₀ |
| Threshold Human Health | Q ₇₋₁₀ |
| Nonthreshold Human Health (Carcinogens) | Harmonic Mean Flow |

The LA portion of the TMDL will be allotted to nonpoint source pollutant loadings and natural quality.

(h) The Department will revise WLAs and LAs because of new or increased pollutant loadings. WLAs shall be revised at or before the expiration date of the current point source discharge permit term.

(i) The Department may require NPDES dischargers and other persons subject to regulation under The Clean Streams Law (35 P. S. §§ 691.1—691.1001) to conduct appropriate monitoring of pollutant sources and waters and report the results and data, to obtain data needed to develop TMDLs and effluent limitations and to determine their effectiveness.

Cross References

This section cited in 25 Pa. Code § 95.10 (relating to treatment requirements for new and expanding mass loadings of Total Dissolved Solids (TDS)).

§ 96.5. Nutrient discharges.

(a) Whenever technically and financially feasible, and environmentally sound, land disposal of wastewater shall be used on a continuous or seasonal basis to prevent or minimize to the maximum extent practicable the discharge of nutrients to surface waters, including tributaries thereof, that are determined to be either threatened or impaired by nutrient enrichment.

(b) When necessary to control eutrophication in a lake, pond, or other impoundment, the Department will develop a TMDL and associated WLAs and LAS based on average annual loading estimates.

(c) When it is determined that the discharge of phosphorus, alone or in combination with the discharge of other pollutants, contributes or threatens to impair existing or designated uses in a free flowing surface water, phosphorus discharges from point source discharges shall be limited to an average monthly concentration of 2 mg/l. More stringent controls on point source discharges may be imposed, or may be otherwise adjusted as a result of a TMDL which has been developed.

Cross References

This section cited in 25 Pa. Code § 96.4 (relating to TMDLs and WQBELs).

§ 96.6. Heated wastewater discharges.

(a) WLAs established for the discharge of heated wastewater shall comply with applicable State and Federal requirements.

(b) Heated wastewater discharges may not cause a change of surface water temperature of more than 2°F during any 1-hour period.

(c) In addition to subsection (b), the allowable heat content of heated wastewater discharges shall be limited to one of the following:

(1) A calculated amount that will raise the temperature of the receiving surface water to no more than the applicable criteria specified in § 93.7 (relating to specific water quality criteria).

(2) An amount based on an evaluation conducted in accordance with section 316(a) of the Federal Clean Water Act (33 U.S.C.A. § 1326(a)).

Cross References

This section cited in 25 Pa. Code § 96.3 (relating to water quality protection requirements); and 25 Pa. Code § 96.4 (relating to TMDLs and WQBELs).

§ 96.7. Public participation.

(a) The Department will publish a notice in the *Pennsylvania Bulletin* of the availability of draft and final lists of surface waters requiring TMDLs under § 96.4(a) (relating to TMDLs and WQBELs). The notice of the draft list shall set forth a minimum 30-day public comment period.

(b) The Department will publish a notice in the *Pennsylvania Bulletin* of the availability of any draft and final TMDL prepared under this chapter. Draft TMDL notices shall be subject to a minimum 30-day comment period. The Department may hold a public hearing on a draft TMDL if there is significant public interest. When the TMDL is prepared concurrent with or as part of an NPDES permit application, the notice may be included in the notice of permit application prepared under § 92.61 (relating to public notice of permit application and public hearing).

Cross References

This section cited in 25 Pa. Code § 96.6 (relating to heated wastewater discharges).

§ 96.8. Use of offsets and tradable credits from pollution reduction activities in the Chesapeake Bay Watershed.

(a) *Definitions.* The following words and terms, when used in this section, have the following meanings, unless the context indicates otherwise:

Aggregator—A person that arranges for the sale of credits generated by another person, or arranges for the credits to be certified, verified and registered.

Agricultural operation—The management and use of farming resources for the production of crops, livestock or poultry, or for equine activity.

Baseline—

(i) The compliance activities and performance standards that must be implemented to meet current environmental laws and regulations related to the pollutant for which credits or offsets are generated.

(ii) The term includes allocations established under this chapter, in a TMDL or in a similar allocation, for the pollutant.

BMP—Best management practice—

(i) Schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce pollutants to surface waters of this Commonwealth.

(ii) The term includes treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

(iii) The term includes activities, facilities, measures, planning or procedures used to minimize accelerated erosion and sedimentation and manage stormwater to protect, maintain, reclaim and restore the quality of waters and the existing and designated uses of waters within this Commonwealth before, during and after earth disturbance activities.

(iv) The term also includes riparian buffers, soil and slope stabilization measures, control of fertilization practices, and other actions and measures designed to reduce erosion and runoff of soil, sediment and pollutants from the land surface during precipitation events; or to reduce the contamination of groundwater with pollutants that may affect surface waters.

(v) The term includes BMP measures developed under this title to reduce pollutant loading to surface waters.

Certification—Written approval by the Department of a proposed pollutant reduction activity to generate credits before the credits are verified and registered to be used to comply with NPDES permit effluent limitations.

Credit—The tradable unit of compliance that corresponds with a unit of reduction of a pollutant as recognized by the Department which, when certified, verified and registered, may be used to comply with NPDES permit effluent limitations.

Credit reserve—Credits set aside by the Department to address pollutant reduction failures and uncertainty.

DMR—Discharge monitoring report—The Department or EPA supplied forms for reporting of self-monitoring results by the permittee.

Delivery ratio—A ratio that compensates for the natural attenuation of a pollutant as it travels in water before it reaches a defined compliance point.

Edge of segment ratio—A ratio that identifies the amount of a pollutant expected to reach the surface waters at the boundary of a Chesapeake Bay Watershed Model segment through surface runoff and groundwater flows from a pollutant source within a watershed segment.

Nutrient—Nitrogen or phosphorus.

Offset—The pollutant load reduction measured in pounds that is created by an action, activity or technology which when approved by the Department may be used to comply with NPDES permit effluent limitations, conditions and stipulations under Chapter 92a (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance). The offset may only be used by the NPDES permittee that the Department determines is associated with the load reduction achieved by the action, activity or technology.

Pollutant—Nutrient or sediment.

Pollutant reduction activity—An activity, such as a BMP or effluent control, that is implemented to prevent or reduce a pollutant load to surface waters of this Commonwealth.

Registration—An accounting mechanism used by the Department to track certified and verified credits before they may be used to comply with NPDES permit effluent limitations.

Reserve ratio—A 10% ratio that is applied to the pollutant reductions generated, which establishes the credits to be set aside for the Department's credit reserve.

Threshold—Activities and performance standards beyond baseline compliance which are required under subsection (d)(3) before credits may be certified.

Tradable load—The amount of nonpoint source pollutant reduction determined to be the projected future pollutant load that is the difference between the total reduction theoretically possible from maximum implementation of pollutant reduction activities, and the reduction associated with a level of pollutant reduction activities identified by the Department as reasonably attainable.

Trade—A transaction that involves the sale or other exchange, through a contractual agreement, of credits that have been certified, verified and registered.

Trading ratio—A ratio applied to adjust a pollutant reduction when calculating credits for a pollutant reduction activity. A trading ratio is used to address uncertainty, water quality, reduction failures or other considerations. The term will include a delivery ratio, an edge of segment ratio and a reserve ratio.

Verification—Assurance that the verification plan contained in a certification, permit or other approval issued by the Department under this section has been implemented. Verification is required prior to registration of the credits for use in an NPDES permit to comply with NPDES permit effluent limitations.

(b) *Chesapeake Bay water quality.*

(1) Credits and offsets may be used to meet legal requirements for restoration, protection and maintenance of the water quality of the Chesapeake Bay.

(2) Credits may be generated only from a pollutant reduction activity that has been certified, verified and registered under this section.

(3) Credits and offsets may be used by permittees to meet effluent limits for nitrogen, phosphorus and sediment expressed as annual loads in pounds contained in NPDES permits that are based on compliance with water quality standards established under the Federal Water Pollution Control Act (33 U.S.C.A. §§ 1251—1387), specifically for restoration, protection and maintenance of the water quality of the Chesapeake Bay.

(4) Credits and offsets may only be used for comparable pollutants, unless otherwise authorized by the Department. For example, nitrogen credits or offsets may only be used to meet nitrogen effluent limits.

(5) The use of credits and offsets must comply with legal requirements under applicable laws and regulations, including the requirements of this section.

(6) Credits and offsets may not be used to comply with technology-based effluent limits, except as expressly authorized under Federal regulations administered by the EPA.

(c) *Methodology.*

(1) *General.* The Department will use one or more of the methods, data sources or conclusions contained in this subsection when certifying a pollutant reduction activity to generate credits.

(2) Credits may be calculated by use of pollutant removal efficiencies for BMPs, and edge of segment and delivery ratios addressing fate and transport of pollutants, consistent with the most up-to-date version of the Chesapeake Bay watershed model. The pollutant removal efficiencies and edge of segment and delivery ratios will be available on the Department's Nutrient Trading web site.

(3) The Department may rely on results from the following modeling tools, as amended or updated, to approve other pollutant removal efficiencies for BMPs:

(i) Science Algorithms of the EPA Models-3 Community Multiscale Air Quality (CMAQ) Modeling System, Atmospheric Modeling Division, National Research Laboratory, U.S. Environmental Protection Agency, EPA/600/R-99/030, (Daewon Byun and Kenneth L. Schere, 2006).

(ii) EPA Watershed Model (Donigian et al. 1994; Linker 1996; Linker et al. 2000).

(iii) EPA Chesapeake Bay Hydrodynamic Model (Wang and Johnson 2000).

(iv) EPA Estuarine Water Quality Model (Cercio and Cole 1993, 1995a, 1995b; Thomann et al. 1994; Cercio and Meyers 2000; Cercio 2000; Cercio and Moore 2001; Cercio et al. 2002a).

(4) The Department may rely on the methods, data sources and conclusions in the following EPA documents, as amended or updated:

(i) *Technical Support Document for Identification of Chesapeake Bay Designated Uses and Attainability.* EPA 903-R-03-004. Region III Chesapeake Bay Program Office, Annapolis, Maryland (2003).

(ii) *Technical Support Document for Identification of Chesapeake Bay Designated Uses and Attainability-2004 Addendum.* EPA 903-R-04-006. Region III Chesapeake Bay Program Office, Annapolis, Maryland (2004).

(iii) *Revision, Chesapeake Bay Program Analytical Segmentation Schemes: decisions and rationales, 1983-2003.* EPA 903-R-04-008. CBP/TRS 268/04. Chesapeake Bay Program Office, Annapolis, Maryland (2004).

(iv) *Revision, Chesapeake Bay Program Analytical Segmentation Schemes: decisions and rationales, 1983-2003—2005 Addendum.* EPA 903-R-05-004. CBP/TRS 278/06. Chesapeake Bay Program Office, Annapolis, Maryland (2005).

(v) *Setting and Allocating the Chesapeake Bay Basin Nutrient and Sediment Loads. The Collaborative Process, Technical Tools and Innovative Approaches.* EPA 903-R-03-007. Region III Chesapeake Bay Program Office, Annapolis, Maryland (2006).

(vi) *Summary of Decisions Regarding Nutrient and Sediment Load Allocations and New Submerged Aquatic Vegetation (SAV) Restoration Goals.* April 25, 2003, Memorandum to the Principals' Staff Committee members and representatives of the Chesapeake Bay headwater states. Virginia Office of the Governor, Natural Resources Secretariat, Richmond, Virginia.

(vii) *The 2002 Chesapeake Bay Eutrophication Model.* EPA 903-R-04-004. U.S. Army Corps of Engineers, Engineer Research & Development Center, Environmental Laboratory (Cercro, C.F., and Noel, M.R., 2004).

(viii) *Ecosystem Models of the Chesapeake Bay Relating Nutrient Loadings, Environmental Conditions and Living Resources Technical Report.* Chesapeake Bay Program Office, Annapolis MD (Kemp, MW., R. Bartlescn, S. Blumenshine, J.D. Hagey, and W.R. Boynlén, 2000).

(ix) *Ambient Water Quality Criteria for Dissolved Oxygen, Water Clarity and Chlorophyll a for the Chesapeake Bay and Its Tidal Tributaries.* U.S. EPA 2003b. EPA 903-R-03-002. Chesapeake Bay Program Office, Annapolis, Maryland.

(5) For a point source, the Department may rely on the information supplied by the permittee in the DMR, including offset information, when certifying a pollutant reduction activity to generate credits.

(6) When certifying a pollutant reduction activity to generate credits, the Department may rely on methods, data sources and conclusions contained in the *Pennsylvania Agronomy Guide* published by Pennsylvania State University, and the *Pennsylvania Technical Guide* published by the Federal Natural Resources Conservation Service. The Department may also rely on other published or peer-reviewed scientific sources.

(d) *Eligibility requirements for the Chesapeake Bay.*

(1) *General.* To generate credits or offsets, the person shall demonstrate a reduction in the pollutant load beyond the pollutant load allowed under applicable baseline requirements, and beyond any applicable threshold.

(2) *Baseline requirements to generate credits.*

(i) For a nonpoint source, the baseline is the set of requirements in regulations applicable to the source at the location where the credits or offsets are generated, and the pollutant load associated with that location as of January 1, 2005. If since that date new requirements or operation changes have occurred that necessitate a revised set of requirements those establish the baseline. For an agricultural operation, baseline includes compliance with the erosion and sedimentation requirements for agricultural operations in Chapter 102 (relating to erosion and sediment control), the requirements for agricultural operations under § 91.36 (relating to pollution control and pre-

vention at agricultural operations), § 92a.29 (relating to CAFO) and the requirements for agricultural operations under Chapter 83, Subchapter D (relating to nutrient management), as applicable.

(ii) For a point source, the baseline is the pollutant effluent load associated with effluent limitations contained in the NPDES permit based on the applicable technology based requirements, or the load in a TMDL or similar allocation, whichever is more stringent.

(3) *Threshold requirements to generate credits.*

(i) To generate credits, an agricultural operation must meet one of the following threshold requirements at the location where the credits are generated.

(A) Manure is not mechanically applied within 100 feet of a perennial or intermittent stream with a defined bed or bank, a lake or a pond. This threshold can be met through one of the following:

(I) There is not a perennial or intermittent stream with a defined bed or bank, a lake or a pond on or within 100 feet of the agricultural operation.

(II) The agricultural operation does not mechanically apply manure, and applies commercial fertilizer at or below agronomic rates contained in the current *Penn State University Agronomy Guide* published by Pennsylvania State University.

(B) A minimum of 35 feet of permanent vegetation is established and maintained between the field and any perennial or intermittent stream with a defined bed or bank, a lake or a pond. The area may be grazed or cropped under a specific management plan provided that permanent vegetation is maintained at all times and there is no mechanical application of manure within the buffer area.

(C) The applicant applies an adjustment of at least 20% to the overall amount of the pollutant reduction generated by the pollutant reduction activity the person is submitting for certification.

(ii) The Department may establish other threshold requirements necessary to ensure the effectiveness of the use of credits to meet legal requirements for restoration, protection and maintenance of the water quality of the Chesapeake Bay.

(4) *Compliance status.* A person who by past or current noncompliance has demonstrated a lack of ability or intention to comply with any of the following is not eligible for certification or offset approval or to use credits or offsets to meet permit effluent limits:

(i) A Department regulation, permit, schedule of compliance, order or certification.

(ii) A law or regulation that addresses pollution of waters of this Commonwealth.

(iii) A contract for the exchange of credits.

(5) *Other requirements.* The Department may establish other eligibility requirements to ensure the effectiveness of the use of credits and offsets to meet legal requirements for restoration, protection and maintenance of the water quality of the Chesapeake Bay.

(6) *Failure to meet eligibility requirements.* If at any time prior to registration of a credit the Department determines that a person no longer meets the eligibility requirements under this section, the Department may take appropriate action, such as prohibiting the person from participating in any trading under this section or denying a request for certification, registration of any credits or approval of offsets.

(e) *Certification requirements for the Chesapeake Bay.*

(1) *General.* A pollutant reduction activity must be certified by the Department for the generation of credits before the credits may be applied to meet permit effluent limitations. Certification will serve as the Department's final determination of the amount of credits that the pollutant reduction activity may generate. A permittee may only use credits to meet permit effluent limits if certification is followed by verification and registration of the credits.

(2) *Request for certification.* A person who wishes to have a pollutant reduction activity certified by the Department to generate credits shall submit a written request for certification in the format required by the Department.

(i) The request for certification must contain information sufficient to demonstrate the following:

(A) That the location where the pollutant reduction activity will be implemented will meet applicable eligibility requirements under subsection (d) and will continue to meet those requirements throughout the applicable term of the certification.

(B) That the pollutant reduction activity will meet acceptable standards for construction and performance, including operation and maintenance, throughout the applicable term of the certification.

(C) That the calculation requirements of this section have been met.

(D) That the implementation of the pollutant reduction activity will be verified as described in a verification plan that meets the requirements of paragraph (5).

(ii) The request for certification must contain the following additional information:

(A) A detailed description of how the credits will be generated by the pollutant reduction activity, including calculations, assumptions and photos.

(B) A map illustrating the locations of the proposed pollutant reduction activity.

(C) Details on the timing of credits, such as the timing of credit generation and delivery, timing of a phase-in period and the time frame for sale and use of credits toward permit effluent limits.

(D) The water quality classification under Chapter 93 (relating to water quality standards), and any applicable impairment listings under section 303(d) of the Federal Water Pollution Control Act (33 U.S.C.A. § 1313(d)), for the receiving stream segment nearest the location of the proposed pollutant reduction activity.

(E) Information on sources of funding used to pay for any portion of the pollutant reduction activity, including the dollar amount and any conditions and restrictions regarding the use of the funds toward the generation or sale of credits.

(F) A description of how risks of failure of the pollutant reduction activity will be managed, such as the use of financial guarantee mechanisms, contractual arrangements, insurance products or reduction of the concentration of projects in a particular sub-watershed.

(G) A description of preservation and conservation easements on lands where the pollutant reduction activity is to be implemented.

(H) Identification of notations on documents submitted in the request which the person submitting the request claims to be confidential business information or a protected trade secret protected from disclosure by law, and a justification for the claims.

(I) The name of the person submitting the request and the names of the participants involved in the pollutant reduction activity.

(J) The professional qualifications of the persons who completed the calculations, conducted the baseline and threshold determinations or otherwise contributed to the technical merits of the request.

(K) Contact information for the person submitting the request.

(3) *Calculation requirements.* The following credit calculation requirements apply:

(i) The calculations must demonstrate how the pollutant reductions will be achieved from the proposed pollutant reduction activity to generate credits for the applicable period of time.

(ii) The pollutant reductions must be expressed in pounds per year.

(iii) The calculations used must be based on methodologies that the Department determines are appropriate under subsection (c).

(iv) The calculation for a point source may include excess load capacity attributable to activities such as effluent controls or the use of offsets.

(v) The calculation must include a 10% set aside for the Department's credit reserve.

(vi) The Department may establish other calculation requirements necessary to ensure that the use of credits is effective in meeting water quality requirements, and to address uncertainty for reasons such as unforeseen events that may disrupt pollutant reduction activities. The calculation requirements may include the need to use trading ratios, risk-spreading mechanisms

and credit reserves. These calculation requirements may reduce the amount of credits the Department may certify for a pollutant reduction activity.

(4) *Other requirements considered for certification.*

(i) The annual sum of all credits certified from nonpoint sources in this Commonwealth's portion of the Chesapeake Bay Watershed may not exceed the applicable tradable load calculated by the Department for this Commonwealth's portion of the Chesapeake Bay Watershed. The tradable load will be available on the Department's Nutrient Trading web site.

(ii) If State or Federal funds are used to cost-share any portion of the pollutant reduction activity contained in the request for certification, the Department may allow the portion of the credits or offsets paid for by State and Federal funds to be available for certification, unless to restrict trading of that portion of the credits restrictions have been placed on the funds by the provider of the funds.

(iii) The Department will not certify a request that includes a pollutant reduction activity related to a farm land conversion action that includes the purchase and idling of a whole farm or a substantial portion of a farm to provide credits for use offsite. The Department will not certify a request that includes a pollutant reduction activity related to a farm land conversion action that includes farmland that is converted from agricultural land to another development type such as commercial or residential. However, to support farm land conservation programs, if a portion of farm land is retired or converted through a program such as one of the following, the action may be eligible for certification:

(A) The United States Department of Agriculture's Farm Services Agency Conservation Reserve Program (CRP).

(B) The United States Department of Agriculture's Conservation Reserve Enhanced Program (CREP).

(C) The United States Department of Agriculture's Natural Resources and Conservation Service's Environmental Quality Incentives Program (EQIP).

(5) *Verification plan.* A request for certification must contain a verification plan.

(i) The verification plan must include the methods for credit verification, such as the documentation of the implemented pollutant reduction activity, sufficient to allow the Department to verify that the pollutant reduction activity in the certification was properly implemented during the applicable compliance period.

(ii) The verification plan must also include one of the following methods. The method contained in the verification plan is subject to approval by the Department:

(A) Self-verification by the person responsible for implementing the pollutant reduction activity.

(B) Third-party verification.

(6) *Certification by the Department.* The Department will certify a pollutant reduction activity when it has determined that the requirements of paragraphs (1)—(5) have been met. In addition, the following apply:

(i) The Department may make a certification contingent on conditions to ensure that the requirements of this chapter will be satisfied.

(ii) The Department may only certify the pollutant reduction activity that will generate credits for use to meet permit effluent limits for the compliance period for which they are certified, verified and registered under this section.

(iii) The Department will only approve a request for certification for multiple compliance periods if the pollutant reduction activity that will generate the credits will be verified and registered separately for each compliance period.

(7) *Compliance.* A person to whom the Department issues a certification under this section shall comply with the terms and conditions of the certification.

(8) *Duration of certification.* The term of a certification is 5 years, unless the certification expressly states otherwise. To obtain a certification term longer than 5 years, a person requesting certification shall demonstrate to the Department's satisfaction that a longer term is warranted based on technological or economic factors, taking into consideration the requirements for restoration, protection and maintenance of the water quality of the Chesapeake Bay.

(9) *Renewal of certification.*

(i) A person seeking renewal of a certification shall submit a written request for renewal at least 180 days prior to the expiration of the certification.

(ii) The Department will provide public notice and an opportunity for informal comment when an administratively complete request is submitted.

(iii) The Department's final determination on a request for renewal will be based on the requirements of this section and on other applicable laws, water quality standards and requirements in effect at the time of the Department's determination.

(iv) By April 13, 2015, the recipient of a certification issued prior to October 9, 2010, shall submit a request for renewal of the certification. The Department will process the request in accordance with this paragraph. This subparagraph does not apply to a certification containing an expiration date.

(10) *Revocation.* The Department may revoke a certification for failure to comply with the conditions of the certification.

(f) *Verification requirements for the Chesapeake Bay.*

(1) *General.* Credits must be verified prior to registration. The following applies to verification:

- (i) Verification must be conducted as described in the approved verification plan.
 - (ii) Verification must demonstrate that the pollutant reduction activity has been implemented as described in the certification, and that other requirements, such as baseline and threshold, are met.
- (2) The Department may conduct other verification activities, such as monitoring and conducting inspections and compliance audits, to ensure that the pollutant reduction obligations are being met.
- (g) *Registration requirements for the Chesapeake Bay.*
- (1) *General.* Credits must be registered by the Department before they may be applied to a permit to meet effluent limitations.
 - (2) *Registration requirements.* The following registration requirements apply:
 - (i) Credits must be certified under the provisions of subsection (e).
 - (ii) Credits must be addressed in a valid contract that ensures that the requirements of this section will be met.
 - (iii) Credits must be verified prior to registration, under subsection (f).
 - (iv) The Department will assign a registration number to each registered credit for reporting and tracking purposes.
 - (3) *Failure to implement.* The Department will not register credits if the person who generates the credits has not implemented, or demonstrates a lack of ability or intention to implement, operations and maintenance requirements contained in the certification, verification plan, or other requirements of this section. The Department will not register credits submitted by an aggregator that is currently not complying, or demonstrates a lack of ability or intention to comply, with this section.
- (h) *Use of credits and offsets to meet NPDES permit requirements related to the Chesapeake Bay.*
- (1) A permittee will only be authorized to use credits and offsets through the provisions of its NPDES permit. The permit conditions will require appropriate terms, such as recordkeeping, monitoring and tracking, and reporting in DMRs.
 - (2) Only credits and offsets generated from activities located within the Chesapeake Bay Watershed may be used to meet NPDES permit requirements related to the Chesapeake Bay. Credits generated in either the Susquehanna or Potomac basins may only be used in the basin in which they were generated, unless otherwise approved by the Department.
 - (3) A permittee shall ensure that the credits and offsets that the permittee applies to its permit for compliance purposes are certified, verified and registered, or approved, under this section for the compliance period in which they are used.
 - (4) The Department may authorize a period of 60 days or less following the completion of the annual compliance period in an NPDES permit, for a

permittee to come into compliance through the application of credits and offsets to the permit provided that the credits were registered and offsets were approved for use during that compliance period.

(5) A permittee relying on credits to demonstrate compliance with its permit effluent limitations, conditions and stipulations under Chapter 92a shall attain and maintain compliance with its permit. A permittee is responsible for enforcing the terms of its trade contract, when needed to ensure compliance with its permit. The Department may waive this requirement where the pollutant reduction activity fails due to uncontrollable or unforeseeable circumstances such as extreme weather conditions, and timely notice is provided to the Department, if the following apply:

(i) The failure is not due to negligence or willfulness on the part of the permittee.

(ii) The Department determines that replacement credits will be available.

(iii) The Department determines that the requirements for restoration, protection and maintenance of the water quality of the Chesapeake Bay will be met due to the requirements of this section, which may include the type of methodologies used when certifying credits, the existence of an approved legal mechanism that is enforceable by the Department, and the use of a credit reserve.

(6) A permittee shall document the use of credits and offsets in DMR forms, which the permittee shall submit at the end of each compliance year or as otherwise provided or required in the permit. Credits and offsets shall only be used to meet permit effluent limits for the compliance period for which they are certified, verified and registered, or approved, by the Department under this section.

(i) *Water quality and TMDLs.*

(1) Use of credits and offsets under this section will be allowed only where surface water quality will be protected and maintained as required by applicable regulations, including this chapter, Chapters 92a and 93, as well as Department permits, schedules of compliance and orders.

(2) Use of credits and offsets under this section must ensure that there is no net increase in discharge of pollutants to the compliance point used for purposes of determining compliance with the water quality standards established by the states of Maryland and Virginia for restoration, protection and maintenance of water quality of the Chesapeake Bay.

(3) Where a TMDL has been established for the watershed where the permitted activity is located, the use of credits and offsets under this section will be consistent with the assumptions and requirements upon which the TMDL is based.

(4) Use of credits and offsets under this section will comply with the anti-degradation requirements contained in Department regulations.

(j) *Public participation.* The Department will publish a notice in the *Pennsylvania Bulletin* of the receipt of administratively complete requests for certifications of a pollutant reduction activity to generate credits. The notice will provide an opportunity for informal comments. This notice is not required to follow the requirements of § 92a.82 (relating to public notice of permit applications and draft permits). The Department will also publish notice in the *Pennsylvania Bulletin* of its final certification determination.

(k) *Use of credits and offsets generally.* Nothing in this section precludes the Department from allowing the use of credits and offsets to be used to meet permit limits other than those established for restoration, protection and maintenance related to the water quality of the Chesapeake Bay.

Authority

The provisions of this § 96.8 issued under sections 5(b), 202, 307, and 402 of The Clean Streams Law (35 P. S. §§ 691.5(b), 691.202, 691.307, and 691.402).

Source

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