Title 26

DEPARTMENT OF THE ENVIRONMENT

Subtitle 08 Water Pollution

Chapter 11 Maryland Water Quality Nutrient and Sediment Trading and Offset Program

Authority: Environment Article, Title 16,

Authority: Environment Article, §§9-313, 9-315, 9-319 and 9-325, Annotated Code of Maryland[1]

Agriculture Article, §§8-901 and 8-904, Annotated Code of Maryland[2]

Notice of Proposed Action

The Secretary of the Environment proposes to adopt new Regulations .01 through .10 under COMAR 26.08.11 Maryland Water Quality Nutrient and Sediment Trading and Offset Program.

Statement of Purpose

The purpose of this action is to establish a trading and offset program to provide greater flexibility and reduce the cost of achieving the total maximum daily loads (TMDL) established by the Environmental Protection Agency (EPA) for the Chesapeake Bay ~~and is~~while being protective of local water quality. The federal Clean Water Act (CWA) sets a goal that all waters of the United States be "fishable" and "swimmable" and requires states to establish appropriate uses for their waters and to adopt water quality standards designed to protect those uses. The CWA also requires states to develop a list of waterways that are impaired by pollutants and do

[1] Md. Code Ann., Envir. § 9-319 authorizes the Maryland Department of the Environment (MDE) to "develop comprehensive programs and plans for the prevention, control, and abatement of pollution of the waters of this State" and grants MDE the authority to adopt rules and regulations to carry this out. Md. Code Ann., Envir. §§ 9-313(a), 9-315. Additionally, Md. Code Ann., Envir. § 9-325 authorizes MDE to "adopt rules and regulations that relate to application for, issuance of, revocation of, or modification of discharge permits." So, to the extent that nutrient credits are part of discharge permits, MDE has the authority to adopt regulations to govern them.

[2] In Md. Code Ann., Agriculture § 8-901, the General Assembly "finds and declares that: (1) Voluntary nutrient trading and sediment trading programs provide an innovative and cost effective approach to enhance water quality and achieve additional water and air quality benefits . . ." Additionally, in § 8-904 the General Assembly acknowledges the "authority of the Department of the Environment to establish eligibility and other requirements for use of nutrient or sediment offset credits under any State or federal permit or other regulation program."

not meet water quality standards. For those waterways placed on the impaired list, a TMDL is developed that identifies the maximum amount of a pollutant the waterway can receive and still meet the state's water quality standards. The framework for achieving the Chesapeake Bay TMDL is the development of a watershed implementation plan by the state that informs smaller-scale watershed implementation plans for jurisdictions throughout Maryland. Based upon Maryland's watershed implementation plan, EPA provided allocations in the Bay TMDL ~~Each jurisdiction's TMDL allocation was divided among the~~to Maryland sources of the three pollutant~~ts sources~~ – nitrogen, phosphorus, and sediment. Jurisdictions then developed individual strategies to implement the allocations. Nutrient and sediment trading and offsets offer an attractive alternative to more traditional approaches for improving water quality and have the potential to achieve results faster ~~and~~ at a lower cost. The trading program addressed by these regulations expands opportunities for all point and nonpoint sources by giving them access to a water quality marketplace and flexibility in meeting and maintaining their load limits by acquiring credits and offsets generated from load reductions in local watersheds~~elsewhere~~.

Comparison to Federal Standards

There is ~~are~~ no corresponding federal standard to this proposed action.

Estimate of Economic Impact

The proposed action has a positive economic impact. Is there documentation required to support this statement?

Economic Impact on Small Businesses

The proposed action has a positive economic impact on small businesses.

Impact on Individuals with Disabilities

The proposed action has no impact on individuals with disabilities.

Opportunity for Public Comment

The Maryland Department of the Environment will hold a public hearing on the proposed regulations at 6:00 PM on _____, 2017 at its Montgomery Park Headquarters located at 1800 Washington Boulevard, Baltimore, Maryland 21230. Comments may be mailed to Gary Setzer, Office of the Secretary, Maryland Department of Environment, 1800 Washington Boulevard, Suite 745, Baltimore, MD 21230. Comments may also be provided by contacting Mr. Setzer by telephone at 410-537-3744 or by email at gary.setzer@maryland.gov. Comments will be accepted through _____, 2017.

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26.08.11 New Material (06/07/17)

.01 Purpose.

A. The purpose of this chapter is to establish a Water Quality Nutrient and Sediment Trading and Offset Program that includes ~~attracts~~ the participation of the private sector and contributes to Maryland's effort to protect and restore the water resources of the Chesapeake Bay and its tributaries as well as local waters. Nutrient and sediment trading offers a promising alternative to more traditional approaches for improving water quality and has~~ve~~ the potential to achieve results faster and at a lower cost. The program affords expanded opportunities for point source permittees and nonpoint sources by creating a water quality marketplace and providing flexibility to meet and maintain pollutant load limits by acquiring credits ~~or offsets~~ generated by pollutant load reductions elsewhere in the Chesapeake Bay watershed.

.02 Scope.

A. This chapter establishes Maryland's Water Quality Nutrient and Sediment Trading and Offset Program; defines the terms used in the program; identifies the persons eligible to participate in the program; and establishes the criteria under which the program will operate, including the generation, certification and verification of credits, monitoring and reporting requirements, and compliance and enforcement procedures.

.03 Definitions.

A. In this chapter, the following terms have the meanings indicated.

B. Terms Defined.

(1) "Aggregator" or "Broker" means a person or entity that collects and compiles credits from individual point and nonpoint sources to resell them.

(2) "Agronomic Practice" has the meaning stated in COMAR 15.20.12.02.B.(2).

(3) "Agricultural Land" or "Farm" has the meaning stated in COMAR 15.20.12.02.B.(3).

(4) "Agricultural operation" or "Operation" has the meaning stated in COMAR 15.20.12.02.B.(4).

(5) "Animal Waste Management System Plan" has the meaning stated in COMAR 15.20.12.02.B.(5).

(6) "Baseline" means the nutrient and sediment control requirements, practices, actions, loading rates, or levels of reductions that must be achieved before a credit seller

Comment [GK1]: I think this should be deleted, as it confuses things. It's always credits that are being bought or sold; the distinction is whether the purpose of the transaction is for compliance (trading) or accounting for a new or increased load (offsetting growth).

Comment [GK2]: Any state in the watershed? If they're contemplating interstate already, we might have additional comments/concerns, or at least would need to review these regs through the interstate lens. I suspect, however, that they mean elsewhere in the Maryland portion of the Bay watershed.

becomes eligible to enter the trading market and sell credits .(see COMAR 15.20.12.02.B(6). And Maryland trading and offset Policy and Guidance Manual updated 4.17.17)

(7) "Bay Restoration Fund (BRF)" means the fund created by Environment Article, §9-1605.2, Annotated Code of Maryland

(8) Best management practice (BMP).

(a) "Best management practice" means a practice, or combination of practices, that is determined to be an effective and practicable method of preventing or reducing the amount of pollution generated by point or nonpoint sources so as to minimize the~~ir~~ movement of those pollutants into the waters of the State~~.~~

(b) BMPs include, but are not limited to, agricultural and urban structural and nonstructural pollution control, operation, and maintenance procedures and practices that prevent or reduce pollutants and / or mitigate flooding.

(9) "Cap" means a legally enforceable aggregate mass load limit contained in a discharge permit.

(10) "Capacity credits" means credits generated by a wastewater treatment plant by maintaining flow at less than the design flow basis on which the assigned ~~nutrient~~ wasteload allocation is based.

(11) "Capacity management plan" means the guidance document published by the Department to assist local governments and other community wastewater treatment plant owners to determine plant capacity and to track the remaining available capacity for allocation.

(12) Chesapeake Bay Program (CBP).

(a) "Chesapeake Bay Program" means the regional partnership that leads and directs Chesapeake Bay restoration and protection.

(b) CBP partners include federal and State agencies, local governments, non-profit organizations, and academic institutions.

(13) "Chesapeake Bay watershed model (CBWM)" means the latest model adopted by the Chesapeake Bay Program used to simulate loading and transport of nitrogen, phosphorus, and sediment from pollutant sources throughout the Chesapeake Bay watershed and provide estimates of watershed nitrogen, phosphorus, and sediment loads resulting from various management scenarios.

Comment [GK3]: Not sure why they are limiting this to nutrients.

(14) Credit.

(a) "Credit" means a measured or estimated unit of pollutant reduction as delivered load per unit of time at the discharge location that can be generated and sold or exchanged in a trade once ~~baseline~~all requirements are ~~is~~ met.

(b) The resulting credit is expressed in pounds per year for total nitrogen, pounds per year for total phosphorus, or tons per year for total suspended solids and adjusted, as appropriate, to account for applicable trading ~~-~~ratios.

(15) "Delivered load" means the amount of a pollutant delivered to the tidal waters of the Chesapeake Bay or its tidal tributaries from an upstream point of discharge or runoff after accounting for permanent reductions in pollutant loads due to natural in-stream processes in nontidal rivers.

(16) Delivery ratio.

(a) "Delivery ratio" means a discount factor applied to point and nonpoint sources to compensate for a pollutant's travel over land and in water.

(b) Delivery ratios account for the rate at which pollutants are reduced through natural processes, such as hydrolysis, oxidation, and biodegradation, on their way through tributaries to the water body of concern.

(17) "Department" or "MDE" means the Maryland Department of the Environment.

(18) "Edge of segment load" or "EOS load" means the amount of ~~land-applied~~ nutrients or sediment expected to reach the surface waters at the boundary of a Chesapeake Bay watershed model segment through surface runoff, groundwater flows, or atmospheric deposition.

(19) "Enhanced Nutrient Removal (ENR)" means a wastewater treatment technology that is capable of reducing the nitrogen and phosphorus concentrations in wastewater effluent to achieve permit limits equivalent to concentrations of no more than 4 milligrams per liter total nitrogen and 0.3 milligrams per liter total phosphorus, as calculated on an annually averaged basis.

(20) "Expanding or Expanded Point Source" means a point source requiring a higher wasteload allocation than its existing wasteload allocation.

(21) "Floating Cap" means an effluent limitation applicable to an enhanced nutrient removal facility which is calculated at the end of each calendar year using the actual annual

Comment [DC4]: Is this still the correct term of art CBP is using in Phase 6? I thought edge of tide -

Comment [GK5R4]: Do we want to add "as delivered load" if it says later in the sentence "at the discharge location"? I'd think that at the discharge location we're talking more edge of stream load, as opposed to delivered load?

Comment [GK6]: It's not just baseline that needs to be met, it's also certification, verification, etc. Suggest changing this to "all requirements".

Comment [DC7]: Will this definition be compativle with new Phase 6 "edge of tide"?

Comment [GK8]: This term has certain agricultural connotations. I don't think edge of segment is a term that applies only to ag, and the term doesn't seem to add anything critical to the definition, so I suggest deleting.

Comment [GK9]: It applies to all three pollutants, right?

flow for the facility ~~times~~ multiplied by a permit-based total nitrogen or total phosphorus concentration converted to units of pounds per year.

(22) Generator.

(a) "Generator" means the original source of pollution reductions embodied in a credit, regardless of subsequent buyers and sellers of the credit.

(b) Generators may be facilities or operations with a point source discharge or a non-point source load~~discharge~~.

(23) "Impervious surface" means any surface that does not allow stormwater to infiltrate into the ground.

(24) "Includes" means includes or including by way of illustration and not by way of limitation.

(25) "Significant industrial discharger" means an industrial discharger with a minimum total nitrogen discharge of 75 pounds per day or a minimum total phosphorus discharge of 10 pounds per day and an annual wasteload allocation included in a discharge permit as an annual loading limit.

(26) "Minor or non-significant wastewater treatment plant" means a wastewater treatment plant treating domestic sewage with a design capacity of less than 500,000 gallons per day.

(27) "Minor permit modification" means a revision to a discharge permit issued to a major or minor facility that does not require a formal public participation process as part of the permit application review.

(28) "Municipal separate storm sewer system (MS4)" means a municipal separate storm sewer as defined in 40 C.F.R. § 122.26(b)(8).

(29) "National pollutant discharge elimination system (NPDES) permit program" means the national system for issuing permits as designated by 33 U.S.C. §1251 et seq., its amendments, and all regulations and rules adopted under the federal Act.

(30) "New point source" means a point source with no wasteload allocation in the 2010 Chesapeake Bay Total Daily Maximum Loads.

Comment [GK10]: "Discharge" is a term of art that refers to point sources, so I suggest "load" here instead. Also adding in the word "source". Really, this 22(b) is too wordy – all it is really saying is that a generator can be a point source or a nonpoint source.

Comment [GK11]: "major facility" and "minor facility" are not defined. I suggest deleting "issued to a major or minor facility". I also strongly suggest referencing the applicable state and/or federal regulation – for federal, it's 40 C.F.R. 122.62 and 40 C.F.R. 122.63.

(31) "Nonpoint source" means a source of pollution that is not a point source and is not from a discernable, confined, and discrete conveyance or other point source as defined in Section 502 (14) of the Clean Water Act, 33 U.S.C. 1342.

(32) "Offset" means load reductions that are acquired by a new or expanded point source or a nonpoint source from other point or nonpoint sources.

(33) "Onsite sewage disposal system (OSDS)" means a sewage system that discharges treated effluent into the ground, such as a septic system.

(34) Performance credits.

(a) "Performance credits" means credits based on the difference between the existing floating cap and:

(i) A floating cap based on actual or projected optimized annual average effluent concentrations; or

(ii) A concentration based annual loading benchmark based on the new projected optimized annual average effluent concentrations.

(b) Performance credits shall not be based on assumed improved performance beyond demonstrated historical performance levels unless data from a similar representative facility is available and relevant.

(35) "Person" has the meaning stated in COMAR 26.08.01.01.B.(62).

(36) "Phase I MS4" means a large or medium municipal separate storm sewer system as defined in 40 C.F.R. § 122.26(b)(4) and (7).

(37) "Phase II MS4" means a small municipal separate storm sewer system as defined in 40 C.F.R. § 122.26(b)(16) that is required to be regulated pursuant to 40 C.F.R. § 122.32 or is designated to be regulated pursuant to 40 C.F.R. § 122.26(a)(9).

(38) Point source.

(a) "Point source" means any discernible, confined and discrete conveyance, from which pollutants are or may be discharged. See section 502(14) of the CWA, 33 U.S.C. § 1362.

(b) Point source includes, but is not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft. ~~See section 502(14) of the CWA, 33U.S.C.1362~~

Comment [GK12]: What is the intention behind this edit?

Comment [GK13]: This is different than the policy document, which I thought just talked about credits and that offsetting growth was one reason to buy credits (see my comment above). This definition seems to confuse things.

Comment [GK14]: I'm confused, because this definition doesn't seem to be based on design flow at all, which is inconsistent with language in the preamble regarding design flow.

(c) Point source does not include agricultural stormwater discharges and return flows from irrigated agriculture.

(39) "Pollutant reduction" means the difference in nutrient or sediment ~~discharges~~ loads to surface and / or ground water achieved by best management practices or technical upgrades, compared to the current load or the applicable baseline after meeting eligibility requirements.

(40) "Registry" means the publicly accessible online database that contains details about pollution credits and trades.

(41) "Reserve ratio" means the application of a specified percentage to the total number of credits in a ~~trade~~ transaction to create a portion that is set aside into a pool or cache of credits.

(42) "Significant wastewater treatment plant" means a publicly owned treatment works or a federally- or privately-owned sewage treatment plant with a design capacity of 500,000 gallons per day or greater, or an industrial point source with daily discharge loadings of nitrogen or phosphorus equivalent to a significant publicly owned secondary treatment works.

(43) "Stormwater" has the meaning stated in COMAR 26.17.02.02.

(44) "Stormwater point source" means a regulated MS4 stormwater discharger such as a Phase I MS4 or a Phase II MS4 entity.

(45) 'Technology-based effluent limitation (TBEL)" means a permit limit for a pollutant that is based on the capability of a treatment method to reduce the pollutant to a certain concentration.

(46) "Third Party" means any entity or person that assists in facilitating credit exchanges or verifying best management practices.

(47) "Total Maximum Daily Load (TMDL)" means a calculation for an impaired waterbody of the maximum amount of a pollutant the waterbody can receive and still meet applicable water quality standards in accordance with the Clean Water Act requirements.

(48) "~~-~~Trading" means a transaction, sale, or other exchange through a contractual agreement between credit generators and credit buyers that have been authorized or certified by the appropriate State agency or its designee.

Comment [GK15]: Same comment as above; "discharge" is a term of art applying to point sources.

Comment [GK16]: I think this should be "credits" OR "offsets and trades". The current language confuses the issues again.

Comment [GK17]: If it just says "trade", then this arguably would not apply to offsets. I think what is really meant is "transaction", so suggest using that word.

(49) Trading ratio.

(a) "Trading ratios" means numeric values used to address various forms of risk and uncertainty by adjusting the available credits for the seller or the credit obligation of the buyer.

(b) Trading ratios include delivery, reserve, retirement and uncertainty ratios.

(50) "Uncertainty ratio" means a ratio that is applied to compensate for possible discrepancies in estimated ~~pollution~~ pollutant reductions resulting from inaccuracy in credit estimation methodology or variability in project performance, or to provide a margin of safety in the achievement of water quality goals.

(51) "Wasteload allocation (WLA)" means the portion of receiving water's loading capacity that is allocated to one or more of its existing or future point sources of pollution.

(52) "Wastewater point source" means a sewage treatment or industrial wastewater discharger ~~facility~~ that has applied for and received a National Pollutant Discharge Elimination System permit.

.04 Eligibility.

A. Any person within the State of Maryland, whether regulated or not regulated by the Department, may create, sell, purchase, retire, or otherwise acquire and use credits generated under the Maryland Water Quality Nutrient and Sediment Trading and Offset Program for the purpose of complying with TMDL allocations or NPDES permit requirements.

B. The Department requires that regulated persons participating in the Maryland Water Quality Nutrient and Sediment Trading and Offset Program possess an effective discharge permit authorizing trading with point and nonpoint sources that allows:

(1) The purchase or acquisition of credits to meet and maintain wastewater point source TMDL wasteload allocation;

(2) The purchase or acquisition of credits to meet a stormwater point source permit-specified portion of their Chesapeake Bay nutrient and sediment reduction requirement; or

(3) The generation and sale or exchange of credits to eligible point and nonpoint sources.

Comment [GK18]: The definition of "load allocation"is not included – why not? Is that not important for baseline determination for nonpoint sources?

Comment [GK19]: Need this unless all of their WLAs are individual WLAs.

Comment [GK20]: Would this language foreclose environmental groups from purchasing and retiring credits for environmental benefit purposes?

C. The Department requires that credits generated by non-regulated sources and septic sectors participating in the Maryland Water Quality Nutrient and Sediment Trading and Offset Program be certified in accordance with this chapter.

D. Eligible participants in the trading and offset program include:

(1) Stormwater point sources;

(2) Industrial stormwater dischargers;

(3) Wastewater point sources;

(4) Non-regulated sources;

(5) Third parties;

(6) Persons engaged in a practice that is approved by the Chesapeake Bay Program and removes nutrients or sediment from the environment;

(7) Persons with certified credits approved by the Maryland Department of Agriculture under the Agricultural Nutrient and Sediment Credit Certification Program;

(8) Persons with certified credits from non-regulated sources in accordance with the provisions of this chapter;

(9) Persons with certified credits resulting from the hook-up of onsite septic systems to a wastewater treatment plant;

Comment [GK21]: Is this different from "onsite sewage disposal system", which is used in D(10) and E(2)?

(10) Persons that aggregate certified agricultural, non-regulated, or onsite sewage disposal system credits or approved point source credits for future sale.

E. The Department may exclude the following persons from participation in the Maryland Water Quality Nutrient and Sediment Trading and Offset Program:

(1) Permittees in significant noncompliance with their permit;

(2) Non-regulated sources or onsite sewage disposal system owners that are in noncompliance with COMAR 26.17.02, 26.04.03, 26.23 or 26.24; or

(3) Agricultural operations that do not comply with COMAR 15.20.12.

.05 General Policies.

A. Total nitrogen, total phosphorus, and total suspended solids are the pollutants eligible for trading under the Maryland Water Quality Nutrient and Sediment Trading and Offset Program.

B. The use of trading or offsets may not cause nor contribute to local water quality impairments, prevent the attainment of local water quality standards, or violate water quality standards.

(1) Where necessary to ensure compliance with local water quality standards, the ~~exchange~~ purchaser of credits in an area within the Chesapeake Bay Watershed subject to an approved local TMDL for total nitrogen, total phosphorus, or total suspended solids ~~with allocations more stringent than the Chesapeake Bay Watershed TMD~~L shall be limited to purchasing those credits generated upstream of where the purchaser's discharge reaches impaired waters until the approved local TMDL has been satisfied.

(2) The trading restriction established in B.(1) of this section shall not apply should it be demonstrated to the Department's satisfaction that the water quality impairment is not likely caused by nutrients or sediment.

C. Each source must satisfy the baseline established in accordance with this chapter or established in its permit before generating credits using a performance-based or practice-based method.

D. Federal, State, and local government grant funding may be used to meet the ~~trading~~ baseline.

E. Credits may be generated using best management practices that reduce total nitrogen, total phosphorus, or total suspended solids and are accepted by the Chesapeake Bay Program.

(1) Before a credit is available for purchase it must be certified by the:

(a) Department through the issuance of a permit; or

(b) Department through its Water Quality Nutrient and Sediment Trading and Offset Program; and/~~or~~ or

(c) Department of Agriculture through its Nutrient and Sediment Credit Certification Program.

(2) Credits shall be quantified using methodologies comparable and consistent with appropriate assumptions and provisions of the Chesapeake Bay TMDL and the Chesapeake Bay Watershed Model. Does the original statement include or exclude CBNTT?

(3) For NPDES and State discharge regulated permittees, loads discharged below the permit established baselines are considered a credit generating practice.

Comment [GP22]: . Actually, stringency here does not matter, except for determining the applicable baseline. Regarding where credits can be purchased, in order to assure local water quality protection, where ever there is a local TMDL, the local TMDL allocation must be met before unrestricted credits can be purchased.
Comment by David McGuigan

Comment [GK23]: Clarifying what I think is meant. Without specifying purchaser, the transaction could go the other way, which I don't think is the intent.

Comment [GK24]: As noted, "discharge" is a term of art, so this might be read as limiting this provision to situations where it is a point source purchasing credits. That is probably the vast majority of situations, though, so I'm not sure it's worth worrying about in this instance, but I'm raising it none the less.

Comment [GK25]: Using the term they defined up above

(4) Credits are generated from certified projects or practices and are valid for one calendar year (January through December) and cannot be banked for future years.

(a) Credits may be used only during the year they are generated.

(b) The total estimated annual credits generated from any practice installed within a given year will be considered to be generated the following year starting January 1.

(5) Permanent credits are available every year in perpetuity and, once verified upon project completion, do not require recertification, but must ~~may~~ be verified annually, except:

(a) If credits are generated from converting on-site septic systems to a permanent hookup to a wastewater treatment plant; or

(b) If credits are generated from a change to the landscape that is permanently protected by an easement or other legal instrument that conveys with the land.

(6) Permittees are required to secure credits in perpetuity or for the term of their permit and to replace expired credits under approved trades with new credits to maintain load reductions achieved in previous years.

(7) The Department shall apply reserve ratios annually to trades of point or nonpoint sources to create a reserve with priority of use given to the sector that created the reserve.

Comment [GK26]: Languaget is confusing – sources aren't traded, credits are. What would the reserve ratio be applied to?

(a) Reserve ratios can be used to:

(i) Address a lack of readily available term or permanent credits for new or expanded point sources in need of offsets at startup; or

(ii) Improve the overall water quality during a year when the reserve is not used to support other situations.

(b) Reserve ratios may vary by sector and may be adjusted over time.

(8) Credits will be tracked, reported, and accessible to the public through the Registry.

F. Trading Regions.

(1) The Department has established the following trading and offsets regions necessary to attain the water quality standards for the tidal waters of the Chesapeake Bay, while also considering the potential effect on local water quality standards:

(a) Potomac River Basin;

(b) Patuxent River Basin; and

(c) Eastern Shore and Western Shore River Basins, including a portion of the Susquehanna watershed.

(2) The Department shall reevaluate the trading and offsets regions as necessary to reflect improvements in modeling or as monitoring data warrants, or as recommended by the Chesapeake Bay Program.

G. Compliance and enforcement of the Maryland Water Quality Nutrient and Sediment Trading and Offset Program shall be in accordance with the Environment Article, §§9-334 through 9-344, Annotated Code of Maryland.

.06 Public Participation.

A. The Maryland Water Quality Nutrient and Sediment Trading and Offset Program has been integrated into the NPDES and State discharge permit process to ensure transparency and tracking of point source credits.

(1) The public notice procedures established for draft permits in the Environment Article, Title 1, Subtitle 6, Annotated Code of Maryland provide an opportunity to comment on tentative determinations to issue a permit, including any trading or offsets proposed by the applicant that may result in the sale or purchase of credits.

(a) The Department shall state in the public notice when any conditions allowing trading or offsets have been included in the draft permit.

(b) When a permit is being revised to incorporate trading or offsets, the public notice required for the permit renewal or major modification shall specify that trading or offsets is being proposed in the draft permit.

(2) NPDES or state discharge permits that specifically or conditionally authorize trading or offsets and have already been subject to public comment during the draft permit public process do not require additional public notice and/or comment periods ~~[to execute trade of credits for sale or purchase and/or offsets for purposes of compliance?]~~ ~~outreach~~.

B. All credit acquisitions and purchases by a MS4 permittee will be reported in annual reports and made available to the public by posting them on the MS4 jurisdiction's website.

.07 Wastewater Point Source Cap Management and Trading and Offsets.

A. Wastewater point source trades shall be implemented and enforced through permits under the National Pollution Discharge Elimination System Permit Program and State Discharge Permit Program.

(1) A wastewater point source is not eligible to trade until:

(a) Effluent limits are adopted in the facility's discharge permit that are consistent with applicable wasteload allocations set forth in the ~~Wasteload allocations, consistent with the~~ local and/or 2010 Bay TMDL or State TMDLs~~, are adopted in the facility's discharge permit~~; and

(b) The facility is in compliance with its effluent limit/wasteload allocation and other pertinent permit requirements as determined by the Department.

(2) A wastewater point source seeking to sell credits shall:

(a) Demonstrate that the sale of credits or ~~trade~~ exchange is consistent with the approved County Water and Sewerage Plan; and

(b) Evaluate the impact of the sale or ~~trade~~ exchange on current and projected sewer allocations.

(3) New or expanding wastewater treatment facilities.

(a) In addition to protecting local water quality, ~~A~~a new or expanding wastewater treatment facility with no allocation in the 2010 Bay TMDL is required to either obtain an existing allocation through trading or otherwise offset the loadings from the new facility or the increased loadings from the expanding facility.

(b) A new or expanding wastewater treatment facility seeking to obtain credits to offset a discharge shall:

(i) Demonstrate that it has secured the contractual right to credits for at least two full five year permit terms; and

(ii) Submit a plan showing how it intends to acquire the necessary credits for at least 10 years beyond the two permit terms for a total planning horizon of 20 years.

(4) Multiple facilities within a watershed may be covered by a bubble or overlay permit that is issued with one nutrient loading cap to:

(a) An owner with multiple facilities operated in the watershed; or

(b) Multiple owners in a watershed electing to form an association and obtain a single permit as co-permittees.

Comment [DC27]: My edits reflect how express this: see 122.44(d)(1)(vii)(B). If MDE regs/permits express this differently that might be OK (e.g., effluent called a WLA in the permit and defined as such)

Comment [DC28]: Add that caveat explicitly here.

Comment [GK29]: What does this mean?

(5) A 5 percent reserve ratio shall be applied to each point-source generated credit.

B. Baseline Calculations. The baseline for generating credits for wastewater point source trading is the annual loading limit wasteload allocation adopted in the discharge permit; except that wastewater point sources generating credits to be used by MS4 stormwater point sources will be restricted to performance-based credits, determined using concentration-based benchmarks.

(1) Significant municipal wastewater treatment plants.

(a) Significant municipal trading baselines are based on:

(i) A design flow capacity consistent with the approved local water and sewer plan as of April 30, 2003; and

(ii) A discharge with an annual average concentration of no more than 4.0 mg/l TN and 0.3 mg/l TP achieved through ENR treatment.

(b) Local TMDLs requiring more stringent baselines are applied as additional limits in the discharge permit where applicable.

(2) Minor municipal wastewater treatment plants.

(a) A minor wastewater treatment plant is not:

(i) Considered to have a specific nutrient load allocation except where it has been included in a discharge permit as a wasteload allocation.

(ii) Eligible to participate in trading or offsets unless an applicable wasteload allocation is included in a discharge permit as a permit limitation.

(b) Minor dischargers that propose to generate credits shall modify their permit to include wasteload allocations, and implement nutrient upgrades to meet and comply with assigned permit requirements.

(c) Trading and offsets baselines for upgraded municipal minors shall be based on a design capacity at the time of the upgrade.

(d) Trading and offsets baselines for municipal minors that did not utilize the Bay Restoration Fund to upgrade their facility shall not exceed either:

(i) The previously assigned 2004 Point Source Tributary Strategy total nitrogen and total phosphorus loading goals for the facility; or

(ii) If greater than 6,100 pounds per year total nitrogen load cap and 457 pounds per year total phosphorus load cap, then no more than 50 percent of the amount that

is above 6,100 pounds per year total nitrogen load cap and 457 pounds per year total phosphorus load cap.

(iii) The remaining 50 percent that is in excess of 6,100 pounds per year of total nitrogen and 457 pounds per year of total phosphorus shall be deposited into the State's reserve pool to be reallocated by the Department on case-by-case basis.

(e) Trading and offsets baselines for municipal minors that utilized the Bay Restoration Fund to upgrade their facility may not exceed either:

(i) The previously assigned 2004 Point Source Tributary Strategy total nitrogen and total phosphorus loading goals for the facility; or

(ii) 6,100 pounds per year total nitrogen load cap and 457 pounds per year total phosphorus load cap, whichever is less.

(iii) The remaining allocation that is in excess of 6,100 pounds per year of total nitrogen and 457 pounds per year of total phosphorus will revert back to the State as a reserve and may be reallocated by the Department on case-by-case basis.

(3) Groundwater dischargers may participate in nitrogen trading or offsets with other point sources once a cap for nitrogen is included in the State groundwater permit as a wasteload allocation and a methodology has been established for the quantification of delivered load.

(4) Significant industrial dischargers. Trading and offsets baselines for significant industrial facilities are based on a combination of historical performance levels, the amount of loading reductions already achieved since the initial baselines established in 1985, and establishment on a case-by-case basis of additional potential loading reductions.

(5) Minor industrial dischargers may enter into trading or offsets upon inclusion of the appropriate baseline wasteload allocation as an effluent limit in their discharge permit.

C. Enforcement. Verification and enforcement of the trading provisions of the permit shall be in accordance with the Environment Article, §§ 9-334 through 9-344, Annotated Code of Maryland, and include a review of certified discharge monitoring reports, appropriate annual reports, inspections, and any other reporting terms specified within the permit.

.08 MS4 Stormwater Point Source Trading and Offsets.

A. MS4 stormwater point source trades and offsets shall be implemented and enforced through permits issued under the Environment Article, Title 9, Subtitle 3, Annotated Code of Maryland and the Department's delegated authority under the Federal Act.

(1) MS4 permittees may only enter into a trade or offset or purchase credits if the use of trading and offsets is specifically authorized under the terms of the MS4 permit.

(a) Permittees are eligible to acquire credits if no unaddressed permit violations exist that are considered by the Department to be significant non-compliance (see Maryland Trading and Offset Policy and Guidance Manual Chesapeake Bay Watershed, updated 4.17.17).

(b) Permittees may treat a permit-specified portion of their permit requirements through trading with wastewater point sources, agricultural nonpoint sources, or non-regulated sources.

(i) Permittees may~~must~~ acquire credits for total nitrogen, total phosphorus, and total suspended solids to meet Chesapeake Bay nutrient and sediment reduction requirements.

Comment [GP30]: Does MDE intend by this to require the permittee to purchase credits to meet its allocations? If they can meet it be practices, is not that acceptable? How about local TMDLs? It is really unclear what is being required here. Comment by David McGuigan

(ii) Credits may be acquired at any time during the permit term to contribute to a portion of the permittee's restoration requirement provided the credits conform to the schedule specified in the permittee's approved restoration plan.

(iii) Trading with wastewater point sources is restricted to wastewater performance credits only determined in accordance with this chapter.

(iv) Permittees may acquire wastewater point source capacity credits if the trading market with other sources, including agriculture, does not reasonably meet the demand in a reliable and cost effective manner. How/when is this determined?

(c) Permittees must acquire and verify credits in perpetuity or replace expired term credits under approved trades with new credits or eligible stormwater management best management practices of equivalent nutrient and sediment reductions to maintain the level of restoration achieved in previous years.

(d) In the event of a default in a trade contract or the invalidation of credits, the MS4 permittee using those credits remains responsible for complying with MS4 permit requirements that would apply if the trade had not occurred.

(2) Reporting.

(a) MS4 permittees shall report the number of acquired credits and the source of the credits in annual reports submitted to the Department.

(b) Reports shall include credit transactions, including

(i) Proof of nonpoint source credit purchases, including the number of acquired credits and their registration numbers

(ii) Demonstration that the information is clearly posted on the web-based registry.

(c) Reports shall be available to the public by posting them on the jurisdiction's website.

.09 Generation and Acquisition of Agricultural Credits.

The requirements and standards for the generation and certification of nonpoint source nutrient and sediment credits on agricultural land are set forth in the Agricultural Nutrient and Sediment Credit Certification Program in COMAR 15.20.12. The credit certification program is designed to reduce the amount of nitrogen, phosphorus, and sediment entering the Chesapeake Bay and its tributaries through the support of a market-based, water quality strategy embodied in the Maryland Water Quality Nutrient and Sediment Trading and Offset Program implemented by the Department.

.10 Generation and Acquisition of Credits by Non-Regulated Sources.

A. Non-regulated sources include:

(1) Rural areas of the State that are not:

(a) Regulated by other NPDES point source discharge permits, or

(b) Determined to be agricultural land use by the Maryland Department of Agriculture.

(2) Small state permitted stormwater sources ~~MS4~~s not regulated by the federal NPDES program.

(3) Onsite sewage disposal systems not regulated under COMAR 26.04.02.07.

B. Credit Generation.

(1) All best management practices implemented for the generation of nutrient and sediment credits by non-regulated sources shall the meet the appropriate baseline and:

(a) Be in conformance with the practices and criteria found in the most recent versions of:

(i) Maryland's Stormwater Design Manual, or

(ii) Maryland's Accounting for Stormwater Waste Load Allocations and Impervious Acres Treated.

(b) Be approved by the appropriate review authority and inspected, maintained, and enforced in accordance with (assuming the specifics as to how to do this is contained in the regulations below:

(i) COMAR 26.17.01 for erosion and sediment control;

(ii) COMAR 26.17.02 for stormwater management;

(iii) COMAR 26.17.04 for construction on nontidal waters and floodplains;

(iv) COMAR 26.23 for nontidal wetlands;

(v) COMAR 26.24 for tidal wetlands; or

(vi) COMAR 26.04.02.07 for onsite sewage disposal systems.

(2) Permanent nitrogen credits generated from converting on-site septics to a permanent hookup to an ENR wastewater treatment plant shall not exceed:

(a) 9.28 pound per year in Critical Area;

(b) 5.8 pound per year within 1,000 feet of any perennial surface water; or

(c) 3.48 pound per year in all other areas of the Chesapeake Bay wastershed.

C. Credit Determination and Verification. All total nitrogen, total phosphorus, and total suspended solid credits generated through the implementation of best management practices and meeting the appropriate baseline shall be determined and verified using:

(1) The latest version of Maryland's BayFast modeling program for calculating nutrient and sediment load reductions to the Bay, or CBNTT, or

(2) Any accounting methods and procedures as stipulated in the General Policies of COMAR 26.08.11.05.

D. Credit Acquisition and Reporting.

(1) Regulated MS4s. All nutrient and sediment credits generated by non-regulated sources shall be acquired and reported by a regulated MS4 in accordance with COMAR 26.08.11.08 of this chapter.

(2) Non-Regulated Sources. Non-regulated sources may acquire credits for total nitrogen, total phosphorus, and total suspended solids to meet voluntary Chesapeake Bay nutrient and sediment reduction goals and be reported in accordance with COMAR 26.08.11.08.