CHAPTER 62-306 WATER QUALITY CREDIT TRADING

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62-306.100 Scope and Intent.

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- (1) This chapter establishes the requirements for water quality credit trading between pollutant sources to reduce or eliminate nutrient or nutrient-related impairments pursuant to Section 403.067, F.S.
- (2) The generation, registration, and trading of water quality credits provided for in this chapter are intended to provide flexibility among pollutant sources to meetin meeting the nutrient reduction requirements of an adopted Basin Management Action Plan (BMAP) or Reasonable Assurance Plan (RAP). Copies of BMAP and RAP documents may be obtained by writing to the Florida Department of Environmental Protection, 2600 Blair Stone Road, MS #3510, Tallahassee, FL 32399-2400.
- (3) A BMAP provides for the implementation of Total Maximum Daily Loads (TMDL) adopted by the Department in Chapter 62-304, Florida Administrative Code (F.A.C.). A RAP, pursuant to Rule 62-303.600, F.A.C., provides for the restoration of impaired
- (4) This chapter does not address aggregation of wasteload allocations by an entity with multiple wastewater facilities, which may be implemented via an aggregate permit that limits the total allocated nutrient TMDL load for the entity.
- (5) Nothing in this rule is intended to limit any actions by federal, state, or local agencies, affected persons, or citizens pursuant to other rules or regulations.
 - (6) Trades under this chapter shall not cause or contribute to any violation of water quality standards.
 - (7) Trades under this chapter shall not lessen permitting requirements otherwise applicable to the buyer or seller.
- Rulemaking Authority 403.067(9) FS. Law Implemented 403.067(8)-(10) FS. History-New 9-6-10, Amended 1-11-16.

62-306.200 Definitions.

- (1) "Baseline" means the annual net nutrient load from a pollutant source after performing all required pollution control activities, below which water quality credits may be generated. The baseline will be set forth in the permit, BMAP or RAP. The baseline for a point source is the entity's annual wasteload allocation under the BMAP or RAP, or a water quality-based effluent limitation established in a permit, whichever is more stringent. The baseline for a non-agricultural nonpoint source is the entity's individual annual load allocation or the applicable categorical load allocation under the BMAP or RAP. The baseline for an agricultural nonpoint source is the entity's annual load allocation or applicable categorical load allocation, if specified in the BMAP or RAP, or the nutrient load expected following the entity's implementation of applicable Florida Department of Agriculture and Consumer Services (DACS) adopted BMPs pursuant to Section 403.067, F.S., whichever is more stringent. For a concentrated animal feeding operation, the baseline is defined by the entity's comprehensive nutrient management plan, or its allocation under the BMAP or RAP, whichever is more stringent.
- (2) "Best management practices (BMPs)" means a practice or combination of practices adopted by rule by DACS, the Department, or the applicable Water Management District water management district as an effective and practicable means for reducing nutrient inputs and improving water quality, taking into account economic and technological considerations.
- (3) "Credit" means the amount of an entity's nutrient load reduction below the baseline that will be available for trading purposes pursuant to the requirements of this chapter. Credits shall be in either the units of pounds per year or kilograms per year.
 - (4) "Department" means the Florida Department of Environmental Protection.
- (5) "Estimated credit" means a credit for nutrient load reductions where treatment methods do not reasonably allow influent and effluent water quality to be measured. All credits that are not measured credits are estimated credits.

- (6) "Location Locational Valuation Factors" (LFs) means-LVFs) are adjustments to credits made by the Department to ensure that trades do not result in localized water quality impacts. Location Factors represent the relative impact a given unit of nitrogen or phosphorus discharged at one location has on the water quality in the impaired target waterbody compared to the same amount of nitrogen or phosphorus discharged at another location. LFs LVFs are used in trades to provide reasonable assurance that the seller's credits are functionally equivalent in protecting the water quality of the waterbody or water segment.
- (7) "Measured credit" means a credit for nutrient load reductions that can be directly monitored using water quality, including effluent, samples.
 - (8) "Municipal separate storm sewer system" or "MS4" has the same meaning as in Rule 62-624.200, F.A.C.
- (9) "Nonpoint source" means a source of pollutants discharged to surface or ground water, generally in response to rainfall events, that is not a point source.
- (10) "Permit" means an authorization issued by the Department pursuant to Chapter 403, F.S., to discharge into surface or ground
- (11) "Point source" means a pollutant discharge requiring a National Pollutant Discharge Elimination System permit pursuant to Chapter 62-620, F.A.C.
- (12) "Target Waterbody" means the receiving waterbody or waterbody segment to which the load allocation applies for purposes of meeting the restoration targets in the applicable BMAP or RAP.
- (13)(12) "Trading Registry" means the water quality credit database created and maintained by the Department to register the generation and trading of water quality credits.
- (14)(13) "Technology-Based Effluent Limitation" (TBEL) means a minimum waste treatment requirement adopted by the Department based on treatment technology.
- (15)(14) "Uncertainty Factor" (UF) means the ratio of the estimated number of pounds or kilograms of nutrient load reduction by a nonpoint source to the number of pounds or kilograms of credit that will be authorized. The UF reflects the uncertainty associated with estimated credits.
- (16)(15) "Wastewater facility" means a facility that accepts and treats domestic wastewater or industrial wastewater as those terms are defined in Rule 62-620.200, F.A.C.
 - (17)(16) "WQBEL" means a Water Quality-Based Effluent Limitation developed pursuant to Chapter 62-650, F.A.C.
- (18)(17) "Water Quality Credit Trading" means the exchange of credits pursuant to the requirements of this chapter between nutrient sources.
- (19)(18) "WBID" means a unique waterbody identification unit used by the Department to divide a waterbody into discrete segments for purposes of assessment and restoration under Section 403.067, F.S.
- (20) Water quality enhancement area" or WQEA means a natural system constructed, operated, managed, and maintained for the purpose of providing offsite regional treatment for which enhancement credits may be generated pursuant to a water quality enhancement area permit issued in accordance with Chapter 62-332, F.A.C.
- Rulemaking Authority 403.067(9) FS. Law Implemented 403.067(8)-(10) FS. History–New 9-6-10, Amended 1-11-16.

62-306.300 General Requirements.

- (1) Credits may be traded only within the boundaries of a BMAP or RAP, or within the boundaries of BMAPs or RAPs addressing hydrologically connected waters, that includes detailed allocations to point sources and detailed or categorical allocations to nonpoint sources individual entities.
- (2) Credits generated by a <u>wastewater</u> point source, other than an MS4, must be confirmed by <u>monthly</u> effluent <u>monitoring</u> incorporated into the applicable permit verifying the achievement of pollutant reductions at least equal to the number of credits sold, which must be undertaken and provided to the Department throughout the life of the trade.
- (3) Credits generated by a nonpoint source or an MS4 must be measured where treatment methods allow influent and effluent water quality to be measured or, where direct measurement cannot reasonably be accomplished, they may be estimated for the type of operation. When estimating credits for nonpoint source pollution control activities, the estimate shall be the long-term average expected reduction. If credits are estimated, the Department will use uncertainty factors, as applicable, to adjust the credits available for trading.
- (4)(a) An individually permitted wastewater facility that proposes to purchase or sell credits must obtain a new or revised Department permit to authorize the use or sale of such credits. The permit shall reflect the amount by which the permitted nutrient

load has been adjusted by the purchase or sale of credits or, if no load was identified in the previous permit, the new or revised permit must reflect the new permitted load, the baseline load, and the basis for the load reduction associated with the trade.

- (a)(b) For trades not involving an entity required to obtain an individual wastewater permit, the Department shall authorize the use and sale of credits in a BMAP or RAP, which will reflect the baseline nutrient load and the basis for the nutrient load reduction associated with the credits.
- (5) Credits are not available for trading until the Department has authorized the credits in a permit, BMAP or RAP. However; however, activities completed before the adoption of the applicable BMAP or RAP are eligible to generate credits if the nutrient reductions resulting from the activities are not part of the baseline that is subsequently adopted in the BMAP or RAP. Credits are expressed as annual loading of nitrogen or phosphorus and cannot be rolled over or aggregated from year to year. A credit retains its environmental value only as long as the activity resulting in its creation continues to provide at least the same level of nutrient load reduction below the baseline load authorized by the Department in the BMAP, RAP or permit, and the Department's authorization for the credit remains in effect. A credit included in an ongoing Department-authorized trade is not available for another trade. The Department will maintain the accounting of credits in its Trading Registry.
- (6) A water quality credit trade shall not result in a net increase in the total nutrient load to a nutrient impaired waterbody or localized violations of water quality standards, nor shall it be used to offset violations of a discharge permit or to comply with any applicable TBELs.
- (7) For trades pursuant to Chapter 62-306, F.A.C. the requirements of this Chapter shall control to the extent that any provision herein conflicts with the provisions of Chapter 62-332, F.A.C., or permits issued thereunder.
- Rulemaking Authority 403.067(9) FS. Law Implemented 403.067(8)-(10) FS. History-New 9-6-10, Amended 1-11-16.

62-306.400 Credit Eligibility.

- (1) Activities that are potentially eligible to generate credits include, but are not limited to:
- (a) Installation or modification of water pollution control equipment or activities that are not required to meet TBELs, WQBELs, or other pollution control obligations requirements, and reduce nutrient loads below the baseline.
- (b) Operational changes or the modification of a process or process equipment that reduce the quantity of water discharged through reuse, recycling, water conservation, or other measures and thereby reduce the load of nutrients discharged. Credits may be generated when a permitted surface water discharge facility closes its operations or ceases discharging to surface waters, but the credits shall only be valid while the permit remains in effect.
 - (c) Implementation of structural nonpoint source management controls.
 - (d) Installation, operation and maintenance of new drainage projects designed to treat stormwater.
- (e) Implementation by agricultural operations of soil or water treatment technologies or water-quality enhancing production practices or systems that are confirmed in writing by DACS to reduce nutrient loads below the baseline.
- (f) Other pollution controls, technologies or management practices with a demonstrated ability to reduce nutrient loads below the baseline established in a BMAP or RAP.
- (g) A documented change in land use that goes beyond normal crop rotations or other standard agronomic practices that results in a reduction of nutrient loads below the baseline land use in the TMDL, BMAP or RAP.
 - (2) Activities that are not eligible to generate credits include:
- (a) A reduction in nutrient loading that is required under a regulatory program, including a BMAP or RAP. However, reductions beyond those required under a regulatory program shall be eligible to generate credits.
 - (b) Implementation of BMPs that are required under a permit or the adopted BMAP or RAP.
- (3) For estimated credits, the Department will calculate the number of credits generated using the same method used to calculate nutrient loading during TMDL, BMAP or RAP development. For an agricultural nonpoint source, the entity must undergo an onsite assessment to identify the specific BMPs that are applicable to the agricultural operation from the suite of adopted BMPs for the type of agricultural operation, assisted by DACS; submit to DACS a BMP checklist and a signed Notice of Intent to implement the applicable BMPs; and fully implement the BMPs as required under Section 403.067, F.S., For any nonpoint source, the entity must exceed their baseline nutrient reduction requirements before the Department will authorize credits for reductions beyond those expected from the applicable BMPs.
- (4) An entity must fully comply with its baseline nutrient load to be eligible for credits resulting from management actions that reduce the nutrient load below the baseline. For an entity that is not a source of nutrients and is not covered by an individual or

 categorical load allocation, the entity may generate credits if it demonstrates in accordance with this chapter that it will reduce nutrient loads to the waterbody.

(5) A credit generated by a WQEA may only be sold once under this Chapter or Chapter 62-332, F.A.C.

Rulemaking Authority 403.067(9) FS. Law Implemented 403.067(8)-(10) FS. History-New 9-6-10, Amended 1-11-16.

62-306.500 Pre-Approval of Credit Generation.

- (1) To obtain Department pre-approval of the number of credits expected to be generated from a project before executing an agreement on a water quality credit trade, the credit generator must submit information to the Department describing in detail the activities that will generate the credits and the expected nutrient load reduction below the generator's baseline. The credit generator must submit the information to the Department on a signed Form 62-306(1), "Pre-Approval of Water Quality Credits Generated Form" effective December 2015 (https://www.flrules.org/Gateway/reference.asp?No=Ref-06313), which is adopted and incorporated by reference herein. Copies of the form may be obtained by writing to the Florida Department of Environmental Protection, 2600 Blair Stone Road (MS #3510), Tallahassee, Florida 32399.
- (2) The Department will notify the credit generator within thirty30 days of receipt of the signed form if the credit generator has not provided the information needed to determine how many credits are expected to be generated. After the credit generator provides all of the required information, the Department will timely notify the credit generator of the maximum number of credits that could potentially be authorized for the project. The Department will determine the number of credits expected to be generated from the activities in accordance with this chapter. The number of credits generated and approved may be modified by the Department if the project specifications are altered between the date of pre-approval issuance and the actual generation of credits. The number of credits needed for a given trade will be dependent on the specific circumstances of the trade, including the location of the buyer of the credits.
- Rulemaking Authority 403.067(9) FS. Law Implemented 403.067(8)-(10) FS. History-New 9-6-10, Amended 1-11-16.

62-306.600 Use of Credits and Credit Adjustments.

- (1) A credit buyer must submit to the Department information on the term of the trade, the number of credits traded, documentation to calculate the credits generated for the trade, the date when the credits will be generated, the timeframe the credits will be applied under the trade, the unit price for each purchased credit, and the amount of any state funding used to generate the credits traded. The credit buyer must submit the trade information to the Department on Form 62-306(2), "Water Quality Credit Trading Affidavit" effective

 December

 2015

 (https://www.flrules.org/Gateway/reference.asp?No=Ref-06315), which is adopted and incorporated by reference herein. Copies of the form, which must be signed by the credit seller and credit buyer, may be obtained by writing to the Florida Department of Environmental Protection, 2600 Blair Stone Road (MS #3510), Tallahassee, FL 32399.
 - (2) The Department will determine whether the seller has credits available in accordance with this ehapter Chapter.
- (3) The Department will notify the buyer within thirty30 days of receipt of the signed Form 62-306(2) if the buyer has not provided the information required to determine the number of credits available for the trade. After the buyer provides all of the required information, the Department will determine in accordance with this chapter whether the seller has a sufficient number of credits available for the trade.
- (4) A water quality credit trade will become effective once the trade is authorized in the BMAP, RAP, or individual wastewater permit approved by the department.
- (5) If the buyer subsequently proposes to change the source of credits, the buyer must submit a new Water Quality Credit Trading Affidavit and obtain the Department's written authorization that the proposed seller has sufficient credits available.
- (6) Credit sellers shall maintain records demonstrating that the control devices and systems, technologies, BMPs, land use changes, or other management actions upon which credits are based continue to be fully implemented and properly operated and maintained throughout the period of the trade. The records shall be retained for five years after conclusion of the period covered by the trade. Each seller shall allow the Department, or an agent of the Department, to inspect the records and the control devices and systems, technologies, BMPs, land use changes, or other management actions during regular business hours.
 - (7) Use of Location Factors LVFs to Adjust Credits.
- (a) For trades where the seller and buyer discharge to different WBIDs, the The amount of credits proposed to be traded shall be adjusted by the applicable LFLVF to provide reasonable assurance that the proposed trade does not result in localized adverse impacts

to is functionally equivalent so that the relative impact of a given unit of nitrogen or phosphorus removed at the seller's location has on the water quality in the target waterbody or water segment compared to the same amount of nitrogen or phosphorus removed at the buyer location.

(b) If the proposed trade occurs within an adopted BMAP or RAP that includes specific trading factor provisions, including Locational Factors (LF) and a credit valuation methodology, the methodology in the BMAP or RAP shall be used to adjust credits. Otherwise, the calculation methodology in paragraph 62-306.600(7)(c), F.A.C., shall be used.

(c)(d) The LVF is calculated and applied independently for each pollutant subject to a trade and is calculated as:

LVF = TF * VF,

Where TF is the Transport Factor and VF is the Variability Factor for the target waterbody.

1. The TF shall be calculated as TF = $(1-Atten_p)/(1-Atten_s)$,

Where Atten_p is the attenuation between the purchasers point of discharge and target waterbody, and Atten_s is the attenuation between the sellers point of discharge and target waterbody.

- a. A modeled attenuation factor is the rate at which pollutants are reduced through biotic and abiotic factors during downstream transport in water. Attenuation factors range from 0 1, with zero representing no reduction, and 1 representing complete removal.
- 2. The LVF shall be calculated as the 95th percentile concentration divided by the arithmetic mean concentration within the target waterbody for the pollutant to be traded.
- a. The period of record used to calculate the VF will be reviewed and approved by the Department; however, at a minimum it must consist of at least 5 years of measured or modelled data reflecting current conditions within the target waterbody.
 - b. The 95th percentile shall be set to the maximum result if there are fewer than 10 values in the available period of record.
- c. For nutrients, the values used to calculate the arithmetic mean and 95th percentile shall be annual geometric means (AGMs) concentrations.
- (d) The number of credits needed for a proposed trade shall transaction must be calculated as follows: Number of Credits Needed = (Number of Pounds or Kilograms Needed standard units of measure for pollutant removed annually required for treatment) x (LF for Buyer's WBID/LF for Seller's WBID).
- (e)(e)LVF. This formula may not be used to reduce the number of credits needed below the number of pounds or kilograms needed.
 - (8) Use of Uncertainty Factors to Adjust Credits.
- (a) For proposed trades involving estimated credits, the Department shall use default UF ratios of 2:1 for urban stormwater (if 2 pounds or kilograms of removal are estimated, 1 pound of credit will be created) and 3:1 for agricultural runoff, unless the Department established the nutrient reduction capability of the activity in the applicable BMAP or RAP, excluding any nutrient reduction capabilities identified as provisional in the BMAP or RAP. However, a buyer or seller may propose and document the basis for a lower UF ratio to the Department if justified by site-specific considerations.
- (b) Site-specific UF will be based on the Department's best professional judgment, taking into account the scientific support for the estimate, the level of confidence that the BMP will be properly designed, installed, maintained, the potential for failure of the BMP, and the level of uncertainty that the estimated load reduction will be achieved.
- (9) For the purposes of this chapter, credits generated by a WQEA shall only be used to meet required nonpoint source contribution reductions assigned in a BMAP or RAP.
- Rulemaking Authority 403.067(9) FS. Law Implemented 403.067(8)-(10) FS. History-New 9-6-10, Amended 1-11-16.

62-306.700 Water Quality Credit Availability and Trade Tracking.

- (1) The Department shall track all credit generation pre-approvals and all credits traded, and shall post the information on its website. To ensure that generated credits are not sold more than once, any trades initiated from a WQEA must be documented in the transaction ledger maintained within the permit pursuant to Chapter 62-332, F.A.C.
 - (2) Information tracked related to credits and trades will include, at a minimum:
 - (a) The names and street addresses of all parties, locations of discharges, receiving water (WBID), and the nutrient involved;
 - (b) The generator's baseline and the amount of credits generated;
 - (c) A description of the actions that generated credits and whether the credits are measured or estimated;
 - (d) The date when credits will initially be generated and applied under the trade, and the effective period of the credits;
 - (e) The amount of credits traded and any adjustments for location or uncertainty;

- (f) The unit price of the credits, including the amount of any state funding used to generate the credits; and,
- 237 (g) The date of the most recent inspection by DACS or the Department to verify implementation of activities generating estimated credits.
 - Rulemaking Authority 403.067(9) FS. Law Implemented 403.067(8)-(10) FS. History-New 9-6-10, Amended 1-11-16.

62-306.800 Compliance with Trade Provisions.

- (1) The seller shall certify and document to the Department annually during the life of the trade that the control devices and systems, technologies, BMPs, land use changes, or other actions on which the credits are based, continue to be fully implemented and properly operated and maintained throughout the life of the trade, and for measured credits, that nutrient load reductions below the baseline continue to be achieved at the authorized level.
- (2) If the credits traded are measured credits, the seller shall report to the Department the quantity of the Total Nitrogen or Total Phosphorus discharged on a monthly basis to demonstrate fulfillment of the nutrient load reduction resulting in credits. If applicable, a permittee may use the precoded Discharge Monitoring Report form provided by the permitting office to the permit holder at the time of permit issuance to report the amount of Total Nitrogen or Total Phosphorus discharged.
- (3) If the credits traded are estimated credits, the seller shall report to the Department quarterly providing the following information:
 - (a) The name and location of the activity generating the credits;
 - (b) The pollutants controlled;
- (c) The BMPs implemented or, in the case of concentrated animal feeding operations, the activities conducted underimplementation of a comprehensive nutrient management plan and other permit requirements;
 - (d) The control devices installed and date completed, and information on their proper operation and maintenance;
 - (e) The linear feet or acres for which BMPs or other management measures or controls have been completed; and,
- (f) A calculation of the quantity of each pollutant controlled using the same methods and procedures used to determine the load reductions and credits.
 - (4) Liability: Consistent with the requirements of Subsection 403.067(8), F.S.:
- (a) A seller of water quality credits is responsible for achieving the load reductions on which the credits are based and complying with the terms of its permit, or the BMAP or RAP, and any trading agreements into which it has entered.
- (b) A buyers of water quality credits is responsible for complying with all terms of the trade and the BMAP, RAP or permit. In the event the Department determines the purchased credits are invalid because the seller fails to achieve the load reductions on which the credits are based, but the buyer or fails to comply with Rule 62-306.800(1)-(2), F.A.C., but the purchaser otherwise meets applicable regulatory requirements, the invalidation of credits shall not be a violation by the buyer. In such cases, the Department shall allow the buyer, within a reasonable amount of time, to obtain credits from another source, increase treatment, or otherwise reduce the discharged load to meet its allocation, and the Department will reflect this fact in the BMAP, RAP, permit, or Administrative Order, as appropriate. Failure to meet its allocation within a reasonable time after the invalidation of credits shall subject the buyer to enforcement in accordance with the provisions of Sections 403.061 and 403.121, F.S.
- Rulemaking Authority 403.067(9) FS. Law Implemented 403.067(8)-(10) FS. History-New 9-6-10, Amended 1-11-16.