**Title 33**

**ENVIRONMENTAL QUALITY**

**Part IX. Water Quality**

**Subpart 2. The Louisiana Pollutant Discharge Elimination System (LPDES) Program**

**Chapter 26. Water Quality Trading**

**§2601. Purpose, Policy, and Authority**

 A. Purpose. The purpose of this Chapter is to implement a water quality trading (WQT) program and establish minimum requirements and procedures for entities regulated under the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.) and the Louisiana Administrative Code (LAC) to meet pollution control requirements through water quality trading in Louisiana. This Chapter shall apply to all persons and sources that participate in WQT, and to the generation, registration, use, and trading of credits and all trading activities that occur under this program.

 B. Policy.

 1. WQT shall be conducted consistent with the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), the LAC, and other relevant state and federal water quality regulations implemented in a manner that:

 a. results in a net improvement of water quality;

b. contributes to meeting water quality standards;

 c. does not cause or contribute to violation of water quality standards, or impairment of designated uses;

 d. does not create localized adverse impacts on water quality and existing and designated uses;

 e. is consistent with the antidegradation policy in LAC 33:IX.1109.A;

 f. is consistent with local, state, and federal water quality requirements;

 g. results in long term improvement in water quality;

 h. increases the pace and scale of restoration and attainment of water quality standards; and

 i. assists in implementing total maximum daily loads (TMDLs).

 AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2074(B)(9).

 HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs and Criminal Investigations Division, LR 45:

**§2603. General Definitions**

 *Best Management Practices (BMPs)*—schedules of activities, prohibitions of practices, maintenance procedures, and other management practices designed to prevent or reduce the pollution of the waters of the state, including; treatment requirements, operating procedures, and practices to control plant site runoff, spillage, leaks, sludge, waste disposal, or drainage from raw material storage.

 *BMP/Project Effectiveness—*the quantitative/qualitative evaluation of source pollution reduction after implementing a BMP(s)/project that is measured over time and accounts for any decrease in pollution capture due to natural and/or anthropogenic phenomenon.

 *BMP Quality Standards*—specifications for the design, implementation, maintenance, and performance tracking of a particular BMP to ensure the estimated water quality benefits of an eligible project are achieved and allow for verification that the BMP is performing as described in an approved WQT plan.

 *Credit*—a measured, modeled, or estimated unit of pollution reduction per unit of time that represents the specific pollutant reduction generated by a BMP at a specific location, as adjusted by attenuation/delivery factors, trading ratios, and baseline requirements as appropriate.

 *Credit Certification*—the formal application and approval process for a potential credit-generating project. (Certification occurs after project review.)

 *Credit-Generating Projects*—activities undertaken for the purpose of generating credits by point or nonpoint sources, including, but not limited to, installing advanced treatment technology, curtailing discharges, and BMPs.

 *Credit Life*—the period from the date a credit is certified and becomes available for sale (i.e., effective date) to the date that the credit is no longer valid (i.e., expiration date).

 *Credit Reserve Pool*—credits that are currently being generated and that have been reviewed, certified, registered, and are available for trade during the credit life.

 *Eligible Project*—implementation of a pollutant management strategy; this may include nonpoint source land treatment BMPs, integrated coastal protection and restoration projects, as well as point source practices, modifications, or technology installation to reduce its pollutant discharge by a particular amount for a particular period of time.

 *Estimated Credit*—a credit for pollutant load reductions where treatment methods do not reasonably allow influent and effluent water quality to be measured. All credits that are not measured are estimated credits.

 *Measured Credit*—a credit for pollutant reduction that can be directly monitored using water quality, including effluent samples.

 *Point of Compliance—*for point sources discharging to surface waters, this is the location at which compliance shall be measured in accordance with limits specified in the Louisiana pollutant discharge elimination system (LPDES) permit.

 *Project Review*—the process of confirming that a credit-generating project has completed the elements that ensure the project provides the proposed water quality improvement.

 *Public Conservation Funds*—public funds that are targeted to support voluntary natural resource protection or restoration. Examples of public conservation funds include, but are not limited to, United States Department of Agriculture (USDA) cost share programs, United States Environmental Protection Agency (EPA) section 319 grant funds, United States Fish and Wildlife Service Partners for Fish and Wildlife Program funds, State Wildlife Grants, and state restoration grants. Public funds that are not considered public conservation funds include: public loans intended to be used for water quality infrastructure projects, such as Clean Water State Revolving Funds, USDA Rural Development funds, and utility sewer storm water and surface water management fees.

 *Quantifiable*—the amount, rate, and characteristics of a discharge reduction that can be measured through an accurate, reliable, and replicable method, procedure, or set of calculations established by an applicable requirement or approved by the department.

 *Registry*—a centralized and easily accessible public ledger wherein credit information and accompanying documentation is stored to document credit issuance, transfer, and holdings.

 *Trading Area*—a geographic area where credits can be bought and sold.

 *Trading Baseline*—the combined pollutant load reductions, site conditions, and/or BMP installation requirements that shall be met prior to trading.

 *Trading Ratios*—numeric values used to adjust the credits generated for a seller and the credits available to meet the obligation of a buyer. Trading ratios account for factors such as, but not limited to, in-stream attenuation or uptake of a pollutant between the locations of the generator and the user of credits, different forms or types of a pollutant, risk of BMP failure, uncertainty as to BMP performance, and net environmental benefit.

 *Water Quality Benefit*—the water quality improvement that can reasonably be attributable to BMPs (for point source-to-nonpoint source trades), wastewater treatment technologies, or practices (point source-to-point source trades) installed at a site.

 *Water Quality Trading or Trade*—a transaction that involves the sale or other exchange, through a contractual agreement, of water quality credits generated from one location that have been verified, certified, registered, and used at another location within a trading area.

 *Water Quality Trading Plan*—a permittee-level document that contains the details of implementing a trade. The WQT plan may be based on an existing watershed trading framework. In the absence of a watershed trading framework, the WQT plan will include all specific details of the trading processes and performance standards.

 *Watershed—*an area of land that drains all waters and rainfall to a common outlet such as a lake, river, stream, or other waters.

 *Watershed Trading Framework*—watershed-level document that contains the specific details of implementing a trade as it applies to multiple permittees trading within a watershed.

 AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2074(B)(9).

 HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs and Criminal Investigations Division, LR 45:

**§2605. Eligibility**

 A. Water quality trading authorized under these regulations may not be used to meet technology-based effluent limitations unless expressly authorized by the underlying effluent guidelines.

 B. The department may authorize trading under the following scenarios.

 1. Point source-to-point source trades are trades between two permitted point sources that require one permittee to reduce the discharge of pollutants below baseline levels required to generate credits, not to include surplus discharge capacity.

 2. Point source-to-nonpoint source trades are trades between a permitted point source and a nonpoint source to reduce the discharge of nonpoint source pollutants below baseline levels required to generate credits.

 3. Other types of trades may be approved by the department on a case-by-case basis.

 C. Water quality parameters eligible for trading include:

 1. nutrients (total nitrogen and total phosphorus), sediment (total dissolved solids, total suspended solids, and turbidity), biological oxygen demand, and temperature;

 2. other parameters that may be approved by the department on a case-by-case basis, provided it does not cause or contribute to an exceedance of a water quality standard; and

 3. persistent bioaccumulative toxics (PBTs) that have the potential to threaten public health will not be considered for trading.

 D. Water Bodies Eligible for Trading

 1. The department may authorize trading to maintain or improve water quality in non-impaired waters, including but not limited to, trading to offset new or increased discharges.

 2. The department may authorize trading where water quality is limited but the waterbody is not subject to a TMDL, to improve water quality and make progress toward attaining water quality standards for impaired waters pending a TMDL, a TMDL alternative, or a state water quality management plan.

 3. The department may authorize trading to meet the goals of a TMDL.

 E. Credit-generating projects eligible for trading include:

 1. installation or modification of facility operations or use of wastewater treatment technologies producing a net environmental benefit, beyond all applicable pollution control obligations, are eligible for point source credit generation;

 2. land treatment projects that follow the United States Department of Agriculture-Natural Resources Conservation Service’s (USDA-NRCS) Louisiana Field Office Technical Guide and do not conflict with any local, state, and federal requirements;

 3. activities in the coastal area as defined by R.S. 49:214.2(4) that are not inconsistent with the Louisiana Coastal Master Plan or any local, state, and federal requirements;

 4. other activities or BMP(s) as approved by the department on a case-by-case basis.

 F. Regulatory Instruments to Authorize Trading

 1. Permits. A WQT plan may be implemented in an LPDES permit in an effort to meet water quality based effluent requirements and/or achieve net reductions of a pollutant, as required by a TMDL or other management strategy. The conditions set forth in the WQT plan that meets the requirements of this Chapter shall be included as enforceable permit condition(s). The permittee is legally responsible for complying with all WQT plan requirements. Registering trades with the department or its designee does not affect the responsibility of a permittee to comply with the terms of its permit;

 2. Compliance Schedules. A water quality trade may be implemented as part of a compliance schedule incorporated in a LPDES permit or a department order so long as the trade is consistent with the requirements of LAC 33:IX.1109.D.1, LAC 33:IX.2713, the Federal Water Pollution Control Act [33 U.S.C. §1251 et seq. and section 502(17)], and 40 C.F.R.122.47.

 AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2074(B)(9).

 HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs and Criminal Investigations Division, LR 45:

**§2607. Requirements of a Water Quality Trading Plan**

 A. If a previously authorized watershed trading framework exists (see LAC 33:IX.2609), and is applicable, a WQT plan shall be consistent with the watershed trading framework. A WQT plan may reference the watershed trading framework or components within the watershed trading framework.

 B. Absent a watershed trading framework, a permit’s WQT plan shall include the following components, as appropriate, and shall describe how they were derived:

 1. the parameter(s) for trading that is being proposed, the number of credits needed, and any credit generation milestones, including a schedule for credit generation;

 2. the trading area, including justification and how it is protective of the relevant designated uses;

 3. trading baseline, including identification of any applicable requirements that apply within the trading area and shall be implemented to achieve baseline requirements (the WQT plan shall also identify sources of applicable regulation or law);

 4. credit-generating projects, including quality and performance standards for those actions, and if necessary, additional criteria for project site design, maintenance, and stewardship;

 5. description of credit quantification methodology, including how pre- and post-project conditions are modeled or measured, the assumptions and inputs used to derive the number of credits, and how baseline will be accounted for;

 6. monitoring and reporting requirements, including parameters to be monitored, monitoring frequency, type of sample required, physical form of the report, and any other trading-related monitoring that may be appropriate in addition to Clean Water Act (CWA) monitoring requirements;

 7. trading ratios, including description of the basis and assumptions supporting each trading ratio and whether it affects the size of the credit obligation or the number of credits generated from an individual trading project;

 8. other mechanisms to mitigate risk of insufficient credit generation, including a reserve pool, insurance, performance bonding, etc. as well as justification for the selection and application of the given mechanisms;

 9. credit life information, including when credits became valid, how long credits remain valid, and renewability of credits;

 10. requirements for review of project site implementation and performance, and the entity that will perform the review, review frequency and content, and the performance standards that are evaluated; and

 11. adaptive management (WQT plans shall include a description of how monitoring and other information may be used over time to adjust trading projects and under what circumstances).

 C. A WQT plan must be public noticed and approved by LDEQ prior to inclusion in a LPDES application, application addendum, or request for permit modification. The conditions set forth in LAC 33:IX.3113 and 6521 for public notice and the public comment period shall apply to WQT plans submitted in accordance with these regulations. The department may amend the WQT plan or require amendments prior to approval.

 D. WQT Plan Revision. An approved WQT plan shall be reviewed and revised whenever an LPDES permit is renewed or modified, or if there is a change in circumstances that affects a WQT plan element. Revised WQT plans shall be submitted to the department for review and approval, and shall be shared publicly for notice and comment. If approved, the department will incorporate the revised plan into the LPDES permit.

 E. Annual Report. The permittee shall submit an annual report to the department that describes the WQT plan implementation and performance over the past year. The department shall make the annual report readily available to the public.

 AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2074(B)(9).

 HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs and Criminal Investigations Division, LR 45:

**§2609. Watershed Trading Frameworks**

 A. The department may establish watershed trading frameworks for one or more watersheds in any TMDL, TMDL implementation plan, independent state water quality management plan, or by a separate agency order to describe details of watershed-level trading processes and standards.

 B. A watershed trading framework shall specify those pollutants that are subject to trading, the trading area, regulations, and applicable TMDL allocations and implementation schedules that will be used to derive trading baseline within that watershed.

 C. The department shall provide an opportunity for public notice and comment before approving a watershed trading framework.

 D. A watershed trading framework is not required in order for the department to approve a WQT plan.

 AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2074(B)(9).

 HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs and Criminal Investigations Division, LR 45:

**§2611. Requirements for Trading Baselines**

 A. The requirements that comprise a trading baseline may be derived from:

 1. technology-based effluent limit or water quality based effluent limits, whichever is more stringent, for point-point source trades that does not include surplus discharge capacity;

 2. LPDES permit requirements;

 3. requirements of a federal land management plan, or an agreement between a federal agency and the state;

 4. tribal laws, rules, or permits;

 5. projects completed as part of supplemental environmental projects or projects required under a permit;

 6. regulatory requirements that a designated management agency establishes to comply with a department-issued TMDL, water quality management plan, or another water pollution control plan adopted by rule or issued by order under the department;

 7. other federal, state, and local rules or laws that establish affirmative requirements for individual nonpoint sources; and

 8. existing conditions where no TMDL/TMDL alternative exists.

 B. Trading baselines shall:

 1. include a specific base year that specifies when credit-generating projects may begin; and

 2. specify any applicable pollution control requirements that may need to be implemented to meet baseline requirements prior to generating credits.

 C. BMPs required to meet baseline requirements and BMPs used to generate additional water quality benefits and trade credits may be installed simultaneously.

 AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2074(B)(9).

 HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs and Criminal Investigations Division, LR 45:

**§2613. Requirements for Trading Areas**

 A. A trading area shall be defined ecologically where a pollution reduction in one part of the area can be linked to a pollutant being traded that results in a net water quality improvement at a point of compliance, which can be demonstrated using accepted and verified model or real-time data.

 B. A trading area shall be defined to reduce the risk of localized or downstream water quality impairments or localized or downstream impacts.

 C. Trading areas shall be developed, documented, and included in a WQT plan on a case-by-case basis.

 D. Trading areas shall be consistent with any applicable TMDL or TMDL alternative.

 AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2074(B)(9).

 HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs and Criminal Investigations Division, LR 45:

**§2615. Quantification of Benefits**

The permittee and creditors will quantify the water quality benefits of a trading project based on estimated values for specific types of BMPs, modeling specific to the watershed trading framework or project, and/or by measuring the water quality benefits of a trading project by direct monitoring of pollutant reductions.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2074(B)(9).

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs and Criminal Investigation Division, LR 45:\*\*.

**§2617. Requirements for Trading Ratios**

 A. WQT shall include one or more trading ratios that apply to credits. Ratio components and underlying assumptions shall be clearly documented in the WQT plan.

 B. Trading ratios may be used to account for variables associated with a trading project including, but not limited to the following:

 1. taking into account risk of project failure;

 2. BMP effectiveness;

 3. measurement uncertainty;

 4. in-stream attenuation of a pollutant between the locations of the generator and the user of credits;

 5. temporal variability;

 6. pollutant equivalency; and

 7. credit retirement for environmental benefit.

 AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2074(B)(9).

 HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs and Criminal Investigations Division, LR 45:

**§2619. Requirements for Credits**

 A. The department may authorize two types of credits dependent on the credit baseline.

 1. Long-term credits shall be available above the credit baseline so long as the project that generates the credit is maintained and meets performance standards.

 2. Interim credits shall be available for nonpoint sources to reach the load allocation of a TMDL for up to five years.

 B. Credits used for compliance with an LPDES permit shall be generated within the trading area of an approved WQT plan.

 C. If trading is anticipated, an approved WQT plan shall be submitted as part of a permit application or department action. Effluent limitations, BMPs, and other requirements from an approved WQT plan shall be included as part of the permit conditions to make the terms of the trade enforceable.

 D. A credit may not be used to meet a regulatory obligation by more than one entity at any given time.

 E. Credit-generating projects shall go through project review, be in place, and be producing water quality benefits during the same time period(s) defined for compliance in an LPDES permit or other regulatory instrument.

 F. Credits may be generated and used as long as pollution controls or practices are maintained and project review confirms that they are functioning as expected.

 G. Credits shall be calculated using best available science, tools, and methodologies, including adjustment by (an) appropriate trading ratio(s).

 H. Credit-generating projects may not include water quality benefits obtained with public conservation funds. Unless otherwise prohibited by the terms and conditions of the public funded project, funding in part by public conservation funds shall be prorated based on the ratio of nonpublic funding used to generate credits.

 I. Credits may be generated from BMPs installed before the department approves a WQT plan.

 J. Credits may be purchased for the purposes of meeting compliance obligations, restoration, and protection and maintenance of water quality.

 K. The acquisition of credits for compliance purposes does not eliminate any requirement to comply with local, state, and federal water quality requirements.

 L. Credits shall be purchased prior to any compliance date in the permit in sufficient number to cover even the worst case scenarios for unexpected environmental conditions (e.g., low river flows) or discharges.

 M. LPDES permits may contain conditions on the use of certified credits, including:

 1. the extent that the requirement of the permit may be satisfied with certified credits;

 2. when and from what source(s) certified credits may be acquired by the permittee; and

 3. requiring periodic monitoring of installed BMPs to verify credit generation/water quality improvements.

 AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2074(B)(9).

 HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs and Criminal Investigations Division, LR 45: