

SUBCHAPTER 13. IMPLEMENTATION OF ANTIDEGRADATION POLICY

Section

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785:46-13-1. Applicability and Scope

(a) The rules in this Subchapter provide a framework for implementing the antidegradation policy stated in OAC 785:45-3-2 for all waters of the state. This policy and framework includes three tiers, or levels, of protection.

(b) The three tiers of protection are as follows:

(1) Tier 1. Attainment or maintenance of an existing or designated beneficial use.

(2) Tier 2. Maintenance or protection of High Quality Waters, Sensitive Public and Private Water Supply waters, and Sensitive Water Supply-Reuse waterbodies.

(3) Tier 3. No degradation of water quality allowed in Outstanding Resource Waters.

(c) In addition to the three tiers of protection, this Subchapter provides rules to implement the protection of waters in areas listed in Appendix B of OAC 785:45. Although Appendix B areas are not mentioned in OAC 785:45-3-2, the framework for protection of Appendix B areas is similar to the implementation framework for the antidegradation policy.

(d) In circumstances where more than one beneficial use limitation exists for a waterbody, the most protective limitation shall apply. For example, all antidegradation policy implementation rules applicable to Tier 1 waterbodies shall be applicable also to Tier 2 and Tier 3 waterbodies or areas, and implementation rules applicable to Tier 2 waterbodies shall be applicable also to Tier 3 waterbodies.

(e) Publicly owned treatment works may use design flow, mass loadings or concentration, as appropriate, to calculate compliance with the increased loading requirements of this section if those flows, loadings or concentrations were approved by the Oklahoma Department of Environmental Quality as a portion of Oklahoma's Water Quality Management Plan prior to the application of the ORW, HQW, SWS, or SWS-R limitation.

785:46-13-2. Definitions

The following words and terms, when used in this Subchapter, shall have the following meaning, unless the context clearly indicates otherwise:

"Specified pollutants" means

(A) Oxygen demanding substances, measured as Carbonaceous Biochemical Oxygen Demand (CBOD) and/or Biochemical Oxygen Demand (BOD);

(B) Ammonia Nitrogen and/or Total Organic Nitrogen;

(C) Phosphorus;

(D) Total Suspended Solids (TSS); and

(E) Such other substances as may be determined by the Oklahoma Water Resources Board or the permitting authority.

785:46-13-3. Tier 1 Protection; Attainment or Maintenance of an Existing or Designated Beneficial Use

(a) General.

(1) Beneficial uses which are existing or designated shall be maintained and protected.

(2) The process of issuing permits for discharges to waters of the state is one of several means employed by governmental agencies and affected persons which are designed to attain or maintain beneficial uses which have been designated for those waters. For example, Subchapters 3, 5, 7, 9 and 11 of this Chapter are rules for the permitting process. As such, the latter Subchapters not only implement numerical and narrative criteria, but also implement Tier 1 of the antidegradation policy.

(b) **Thermal pollution.** Thermal pollution shall be prohibited in all waters of the state. Temperatures greater than 52 degrees Centigrade shall constitute thermal pollution and shall be prohibited in all waters of the state.

(c) **Prohibition against degradation of improved waters.** As the quality of any waters of the state improves, no degradation of such improved waters shall be allowed.

785:46-13-4. Tier 2 Protection; Maintenance and Protection of Sensitive Water Supplies- Reuse and other Tier 2 Waterbodies

(a) General rules for Sensitive Water Supply – Reuse (SWS-R) Waters

(1) Classification of SWS-R Waters. The Board may consider classification of a waterbody as an SWS-R waterbody based upon required documentation submitted by any interested party. The interested party shall submit documentation presenting background information and justification to support the classification of a waterbody as SWS-R including, but not limited to, the following:

(A) Determination of the waterbody's assimilative capacity pursuant to 785:46-13-8, including all supporting information and calculations.

(B) Documentation demonstrating that indirect potable reuse discharge for the purpose of water supply augmentation has been considered as part of a local water supply plan or other local planning document.

(C) Any additional information or documentation necessary for the Board's consideration of a request for the classification of a waterbody as SWS-R

Prior to consideration by the Board, any interested party seeking the classification of a waterbody as SWS-R shall submit documentation to OWRB staff demonstrating that local stakeholders, including those that use the waterbody for any designated or existing beneficial uses, have been afforded notice and an opportunity for an informal public meeting, if requested, regarding the proposed classification of the waterbody as SWS-R at least one hundred eighty (180) days prior to Board consideration. In addition, all information or documentation submitted pursuant to this subsection shall be available for public review.

(2) The drought of record waterbody level shall be considered the receiving water critical condition for SWS-R waterbodies.

(A) All beneficial uses shall be maintained and protected during drought of record conditions.

(B) Drought of record shall be determined with the permitting authority approved monthly time step model using hydrologic data with a minimum period of record from 1950 to the present. If empirical data are not available over the minimum period of record, modeled data shall be included in the analysis, if available.

(3) In accordance with OAC 785:45-5-25(c)(8)(D), SWS-R waterbodies with a permitted discharge shall be monitored and technically evaluated to ensure that beneficial uses are protected and maintained and use of assimilative capacity does not exceed that prescribed by permit. Prior to any monitoring and/or technical analysis, the permittee shall submit a Receiving Water Monitoring and Evaluation Plan to the permitting authority for review and approval.

(A) The Receiving Water Monitoring and Evaluation Plan shall include, at a minimum, the following sections:

(i) Monitoring section that meets the required spatial, temporal, and parametric coverage of this subchapter, OAC 785:46-15, and OAC 252:628-11.

(ii) Analysis and reporting section that meets the requirements of this subchapter, OAC 785:46-15, and OAC 252:628-11.

(iii) Quality Assurance Project Plan that meets the most recent requirements for United States Environmental Protection Agency Quality Assurance Project Plans.

(B) The monitoring section of the Receiving Water Monitoring and Evaluation Plan, at a minimum shall:

i. Address parametric, temporal (including frequency of sampling events), and spatial sampling design adequate to characterize water quality related to limnological, hydrologic, seasonal, and diurnal influences and variation.

ii. Address nutrient monitoring adequate to characterize both external and internal loading and nutrient cycling.

iii. Address algal biomass monitoring consistent with this sub-paragraph and phytoplankton monitoring sufficient to evaluate general shifts and/or trends in phytoplankton community dynamics over time.

iv. Address in-situ monitoring of dissolved oxygen, temperature, and pH adequate to characterize diurnal changes and fluctuations during periods of thermal stratification and complete mix.

v. Address characterization of those pollutants with a permit effluent limit and/or permit monitoring requirements.

(C) The Receiving Water Monitoring and Evaluation Plan may include special studies, as necessary.

(D) At least biennially and prior to permit renewal, the permittee shall submit a Receiving Water Monitoring and Evaluation Report to the permitting authority that includes, at a minimum:

i. Summarized review of monitoring objectives and approach.

ii. Presentation and evaluation of monitoring results, including an analysis of both short-term and long-term trends.

iii. An assessment of beneficial use attainment that is at a minimum in accordance with OAC 785:46-15.

iv. Summarized assessment of data quality objectives, including an explanation of any data quality issues.

iii. All monitoring data shall be submitted electronically.

If the report documents nonattainment of a beneficial use(s) resulting from the discharge, the permitting authority shall consider actions including, but not limited to, additional permit requirements, cessation of the discharge, and/or a recommendation to OWRB to revoke the SWS-R waterbody classification.

785:46-13-5. Tier 2.5 Protection; Maintenance and Protection of High Quality Waters, Sensitive Water Supplies, and Other Tier 2.5 Waterbodies

(a) **General rules for High Quality Waters.** New point source discharges of any pollutant after June 11, 1989, and increased load or concentration of any specified pollutant from any point source discharge existing as of June 11, 1989, shall be prohibited in any waterbody or watershed designated in Appendix A of OAC 785:45 with the limitation "HQW". Any discharge of any pollutant to a waterbody designated "HQW" which would, if it occurred, lower existing water quality shall be prohibited. Provided however, new point source discharges or increased load or concentration of any specified pollutant from a discharge existing as of June 11, 1989, may be approved by the permitting authority in circumstances where the discharger demonstrates to the satisfaction of the permitting authority that such new discharge or increased load or concentration would result in maintaining or improving the level of water quality which exceeds that necessary to support recreation and propagation of fishes, shellfishes, and wildlife in the receiving water.

(b) **General rules for Sensitive Public and Private Water Supplies.** New point source discharges of any pollutant after June 11, 1989, and increased load of any specified pollutant from any point source discharge existing as of June 11, 1989, shall be prohibited in any waterbody or watershed designated in Appendix A of OAC 785:45 with the limitation "SWS". Any discharge of any pollutant to a waterbody designated "SWS" which would, if it occurred, lower existing water quality shall be prohibited. Provided however, new point source discharges or increased load of any specified pollutant from a discharge existing as of June 11, 1989, may be approved by the permitting authority in circumstances where the discharger demonstrates to the satisfaction of the permitting authority that such new discharge or increased load will result in maintaining or improving the water quality in both the direct receiving water, if designated SWS, and any downstream waterbodies designated SWS.

(c) **Stormwater discharges.** Regardless of subsections (a) and (b) of this Section, point source discharges of stormwater to waterbodies and watersheds designated "HQW", "SWS-R" and "SWS" may be approved by the permitting authority.

(d) **Nonpoint source discharges or runoff.** Best management practices for control of nonpoint source discharges or runoff should be implemented in watersheds of waterbodies designated "HQW", "SWS-R" or "SWS" in Appendix A of OAC 785:45.

785:46-13-6. Tier 3 Protection; Prohibition Against Degradation of Water Quality in Outstanding Resource Waters

(a) **General.** New point source discharges of any pollutant after June 11, 1989, and increased load of any pollutant from any point source discharge existing as of June 11, 1989, shall be prohibited in any waterbody or watershed designated in Appendix A of OAC 785:45 with the limitation "ORW" and/or "Scenic River", and in any waterbody located within the watershed of any waterbody designated with the limitation "Scenic River". Any discharge of any pollutant to a waterbody designated "ORW" or "Scenic River" which would, if it occurred, lower existing water quality shall be prohibited.

(b) **Stormwater discharges.** Regardless of 785:46-13-5(a), point source discharges of

stormwater from temporary construction activities to waterbodies and watersheds designated "ORW" and/or "Scenic River" may be permitted by the permitting authority. Regardless of 785:46-13-5(a), discharges of stormwater to waterbodies and watersheds designated "ORW" and/or "Scenic River" from point sources existing as of June 25, 1992, whether or not such stormwater discharges were permitted as point sources prior to June 25, 1992, may be permitted by the permitting authority; provided, however, increased load of any pollutant from such stormwater discharge shall be prohibited.

(c) **Nonpoint source discharges or runoff.** Best management practices for control of nonpoint source discharges or runoff should be implemented in watersheds of waterbodies designated "ORW" in Appendix A of OAC 785:45, provided, however, that development of conservation plans shall be required in sub-watersheds where discharges or runoff from nonpoint sources are identified as causing or significantly contributing to degradation in a waterbody designated "ORW".

(d) **LMFO's.** *No licensed managed feeding operation (LMFO) established after June 10, 1998 which applies for a new or expanding license from the State Department of Agriculture after March 9, 1998 shall be located...[w]ithin three (3) miles of any designated scenic river area as specified by the Scenic Rivers Act in 82 O.S. Section 1451 and following, or [w]ithin one (1) mile of a waterbody [2:9-210.3(D)] designated in Appendix A of OAC 785:45 as "ORW".*

785:46-13-7. Protection for Appendix B Areas

(a) **General.** Appendix B of OAC 785:45 identifies areas in Oklahoma with waters of recreational and/or ecological significance. These areas are divided into Table 1, which includes national and state parks, national forests, wildlife area, wildlife management areas and wildlife refuges; and Table 2, which includes areas which contain threatened or endangered species listed as such by the federal government pursuant to the federal Endangered Species Act as amended.

(b) **Protection for Table 1 areas.** New discharges of pollutants after June 11, 1989, or increased loading of pollutants from discharges existing as of June 11, 1989, to waters within the boundaries of areas listed in Table 1 of Appendix B of OAC 785:45 may be approved by the permitting authority under such conditions as ensure that the recreational and ecological significance of these waters will be maintained.

(c) **Protection for Table 2 areas.** Discharges or other activities associated with those waters within the boundaries listed in Table 2 of Appendix B of OAC 785:45 may be restricted through agreements between appropriate regulatory agencies and the United States Fish and Wildlife Service. Discharges or other activities in such areas shall not substantially disrupt the threatened or endangered species inhabiting the receiving water.

(d) **Nonpoint source discharges or runoff.** Best management practices for control of nonpoint source discharges or runoff should be implemented in watersheds located within areas listed in Appendix B of OAC 785:45.

785:46-13-8. Assimilative Capacity in Surface Waters

(a) Determination of Assimilative Capacity

(1) All water quality monitoring and technical analysis necessary to determine waterbody assimilative capacity for all numeric and narrative criteria and associated parameters protective of waterbody beneficial uses shall be conducted by the interested party.

(2) Prior to initiating any monitoring or technical analysis to support determination of waterbody assimilative capacity, the interested party shall submit a workplan consistent with the requirements of OWRB technical guidance TRWQ2017-01 for review and approval by OWRB staff.

(3) As part of an approved workplan, the interested party shall characterize existing water quality of the receiving waterbody for each applicable criteria and associated parameters

and evaluate if there is available assimilative capacity. Consistent with OWRB technical guidance TRWQ2017-01, characterization of existing water quality shall address, at a minimum:

- (A) Measurement of load and or concentration for all applicable criteria and associated parameter(s) in the receiving water; and
 - (B) The measurement of both existing and proposed point and nonpoint source discharge concentrations and or loadings, including the measurement of external and internal nutrient loading, where required by OWRB technical guidance TRWQ2017-01; and
 - (C) The critical low flow or critical lake level of the receiving waterbody, including drought of record in waterbodies receiving IPR discharges; and
 - (D) The limnological, hydrologic, seasonal, spatial and temporal variability and critical conditions of the waterbody; and
 - (E) Volumetric determination of anoxic dissolved oxygen condition consistent with OAC 785:45 and 785:46; and
 - (F) The waterbody specific results of Oklahoma's 303(d) list as contained in the most recently approved Integrated Water Quality Assessment Report.
- (4) Assimilative capacity shall be determined by comparing existing water quality, as determined by compliance with subsection (a)(3) to the applicable narrative and numeric criteria. Assimilative capacity shall be determined and used with a margin of safety (c)(1)(D), which takes into account any uncertainty between existing or proposed discharges and impacts on receiving water quality.
- (5) When existing water quality does not meet the criterion or associated parameter necessary to support beneficial use(s) or is identified as impaired on Oklahoma's 303(d) list as contained in the most recently approved Integrated Water Quality Assessment Report, no assimilative capacity shall exist for the given criterion.
- (b) Use of Assimilative Capacity in Tier 1 Waters
- (1) Water quality shall be maintained to fully protect all designated and existing beneficial uses.
- (c) Use of Assimilative Capacity in Tier 2 Waters
- (1) If it is determined that assimilative capacity is available, the consumption of assimilative capacity may be allowed in a manner consistent with the requirements in 40 CFR 131.12(a)(2) and this subchapter. In allowing the use of assimilative capacity, the State shall assure that:
- (A) Water quality shall be maintained to fully protect designated and existing beneficial uses.
 - (B) Assimilative capacity shall be maintained such that all applicable narrative criteria in OAC 785:45 are attained and beneficial uses are protected.
 - (C) In order to preserve a margin of safety, in no case will any point source and or nonpoint source discharge be authorized such that water quality is lowered beyond:
 - i. Fifty percent (50%) of the available assimilative capacity for all applicable water quality criteria listed in OAC 785:45, Appendix G, Table 2. The bioaccumulative nature of a pollutant shall be considered when applying margins of safety to use of assimilative capacity.
 - ii. Eighty percent (80%) of the applicable numeric criterion for chlorophyll-a, total phosphorus, and total nitrogen. If numeric criteria are not available, the narrative nutrient criterion (785:45-9(d)) shall be applied and an eighty percent (80%) margin of safety applied to the parameters listed in the criterion. If the existing water quality condition exceeds 80% of the applicable criterion, but does not exceed the criterion, the existing water quality condition shall be maintained.

- iii. An anoxic lake volume greater than forty-five percent (45%). If the existing anoxic volume is greater than 45%, but does not exceed the criterion, the existing anoxic volume shall be maintained.
- (D) When existing water quality does not satisfy the applicable criterion and support beneficial use(s) or has been designated as impaired in Oklahoma's 303(d) list as contained in the most recently approved Integrated Water Quality Assessment Report, the applicable criterion shall be met at the point of discharge. If a TMDL has been approved for the impairment, loading capacity for the parameter may be available if TMDL load allocations include the proposed load from the discharge.
- (2) An analysis of alternatives shall evaluate a range of practicable alternatives that would prevent or lessen the water quality degradation associated with the proposed activity. When the analysis of alternatives identifies one or more practicable alternatives, the State shall only find that a lowering is necessary if one such alternative is selected for implementation.
- (3) If after an analysis of alternatives, it is demonstrated that a practicable alternative does not exist, the discharger must demonstrate a lowering of water quality is necessary to accommodate important economic or social development in the area in which the waters are located.
- (d) Use of Assimilative Capacity in Tier 2.5 or 3.0 Waters
 - (1) Consistent with 785:45-3-2(a) - (c), 785:45-5-25(a), 785:45-5-25(b), and 785:45-5-25(c)(1) – (c)(6) all available assimilative capacity shall be reserved in waterbodies classified as Tier 2.5 or 3.0 waters.
- (e) Agencies implementing subsection 8(c), shall conduct all activities with intergovernmental coordination and according to each agency's public participation procedures.