

Executive Summary

Proposed Texas Surface Water Quality Standards

Chapter 307 Rule Amendment

June 23, 2000

Subject: **Docket No. 1999-1352-RUL.** Consideration for adoption of the rules review and readoption with amendments of 30 TAC Chapter 307, Texas Surface Water Quality Standards. All sections except Section 307.1, General Policy Statement, contain amendments. The review is in accordance with Texas Government Code, Section 2001.039 and the General Appropriations Act, Article IX, Section 9-10.13, 76th Legislature, 1999, which require state agencies to review and consider for readoption each of their rules every four years. The amendments revise the state's surface water quality standards and satisfy the federal Clean Water Act requirement for states to publicly review and revise their surface water quality standards every three years. The proposed amendments and notice of intention to review were published in the February 4, 2000 issue of the *Texas Register* (25 TexReg 677 and 824). (Jim Davenport/Tom Weber) (Rule Log No. 1998-055-307-WT)

What the Adopted Rules Would Do:

The adopted rules revise the state's surface water quality standards contained in 30 TAC Chapter 307. The standards must be reviewed and, if appropriate, revised at least every three years pursuant to §303 of the Federal Clean Water Act. The standards were last reviewed in 1995 and last revised in 1997. These revisions were approved by the U.S. Environmental Protection Agency (EPA) in 1998.

The adopted revisions to the standards incorporate new information and improved data gathered on water quality of water in the state as well as new and revised EPA requirements. The revisions also provide clarity on how standards apply to certain permitting situations.

Significant changes to the standards include:

- The specific inclusion of habitat as a part of aquatic life uses. Vegetative and physical components of the aquatic environment are currently maintained or mitigated to protect existing aquatic life uses. Procedures to protect habitat in permits for dredge and fill activities are already specified in §404 of the Federal Clean Water Act and in 30 TAC Chapter 279 (relating to Water Quality Certification.) Specific inclusion of habitat in the aquatic life provision would reflect the review that is currently being conducted in the consideration of discharge permits, and be consistent with commitments to EPA and U.S. Fish and Wildlife that occurred during the Texas Pollutant Discharge Elimination System (TPDES) delegation discussions.
- The inclusion of seagrass propagation as a new water-quality related use that is protected under the Texas Surface Water Quality Standards. The Texas Natural Resource Conservation Commission (TNRCC) in conjunction with the General Land Office, Galveston Bay Estuary Program, Coastal Bend Bays and Estuary Program, and Texas Parks and Wildlife Department sponsored the "Seagrass Conservation Plan" for Texas

where TNRCC agreed to consider adding seagrass propagation to the standards as part of the seagrass plan.

- Adding “wetland water quality functions” as a category of water-quality related use.
- Revising the water quality standards for three segments based upon the results of Use Attainability Analyses. The riverine section of Sam Rayburn Reservoir, where the Angelina River enters the reservoir, is changed from high to intermediate aquatic life use for a small, newly created segment in the upper riverine portion of the reservoir. A proposed site-specific standard for aluminum in this area of the Angelina River is deleted pending additional toxicity testing. The Nueces River Tidal at Corpus Christi is changed from exceptional to high aquatic life use, and the lower Pease River is changed from high to intermediate aquatic life use.
- Providing new provisions for temporary variances, clarifying how interim effluent limits relate to temporary variances, and providing a new provision for temporary standards.
- Revising definitions for terms such as “fecal coliform,” “best management practices,” “mixing zone,” “surface water in the state;” adding new definitions for terms such as “attainable use,” “biological integrity,” “*E. coli*,” “Enterococci,” “existing use,” “designated use,” “pollution,” “presumed use,” “seagrass propagation,” “significant aquatic life use,” “storm water,” “storm water discharge,” “tidal,” and “wetland water quality functions.”
- Revising narrative provisions in the general criteria concerning toxic criteria applicability, salinity provisions, and the general provision to maintain dissolved oxygen for aquatic life categories.
- Amending the antidegradation policy to conform to EPA terminology referring to a “tier” approach, and clarifying antidegradation review procedures for wastewater, dredge and fill projects, and other activities.
- Revising toxic criteria to protect aquatic life, including the adjustment of criteria for dissolved metals as required by EPA.
- Revising numerous toxic criteria to protect human health based on updated information on toxicity of specific toxic substances.
- Changing the indicator bacteria for contact recreation from fecal coliform to *E. coli* in freshwater and enterococci in saltwater.
- Clarifying the low-flow condition for applying acute toxic criteria in streams and providing a clarification of standards applicability to storm water discharges.
- Updating procedures for assessing instream standards compliance and providing new provisions for measuring biological integrity.
- Revising Appendices A-E to add and update site-specific standards for numerous water bodies, in addition to revising aquatic-life uses for three segments in Appendix A (as discussed above). An additional 103 sites are assigned aquatic life uses and criteria for

dissolved oxygen in Appendix D, and an additional 15 sites are assigned site-specific toxic criteria in Appendix E. Criteria for total dissolved solids, chloride, and sulfate were revised for numerous water bodies in Appendix A based on additional instream data.

The commission is also adopting the review of 30 TAC Chapter 307, concerning Texas Surface Water Quality Standards. The review is in accordance with Texas Government Code, §2001.039, and the General Appropriations Act, Article IX, §9-10.13, 76th Texas Legislature, 1999, which require state agencies to review and consider for readoption each of their rules every four years.

In conjunction with the revisions to the water quality standards in Chapter 307, the commission has also revised implementation procedures which address how the water quality standards are applied in wastewater discharge permits. The implementation procedures (IP) are contained in a guidance document entitled *Procedures to Implement the Texas Surface Water Quality Standards*. The revised document reflects changes in response to revisions to Chapter 307 and in response to public comments. Information has been added on endangered and threatened species, temporary standards and variances, dissolved oxygen modeling, antidegradation review, discharges to water bodies which are listed as impaired on the “303(d) list,” effluent limits for total dissolved solids, total maximum daily loads (TMDLs), and storm water permits.

In addition to public comments, the staff received substantial comments from EPA on the “Whole Effluent Toxicity Testing (Biomonitoring)” section of the IP during the previous public comment period. Because of the significance of additional changes in response to EPA’s comments, the staff intends to provide an additional 30-day public comment period on the IPs. The revised implementation procedures will then be presented for approval at a future TNRCC agenda.

Applicable Law:

These amendments are adopted under the Texas Water Code, §26.023, which provides the TNRCC with the authority to make rules setting water quality standards for all water in the state. These amendments are also being adopted under Texas Water Code, §5.103, which authorizes the commission to adopt any rules necessary to carry out its powers and duties under the Texas Water Code and other laws of this state and §5.105, which authorizes the commission to establish and approve all general policy by rule. The amendments will satisfy the provision in the Federal Water Pollution Control Act (Clean Water Act), §303(c), which requires states to adopt water quality standards and requires states to review and if appropriate, revise standards from time to time, but at least once each three-year period. The rules review was conducted in accordance with Texas Government Code, §2001.039 and the General Appropriations Act, Article IX, §9-10.13, 76th Legislature, 1999.

Reason Rules Are Needed:

The federal Clean Water Act requires states to review and, if appropriate, revise their surface water quality standards once every three years: 1) based on new scientific or technical information; 2) based on environmental changes; 3) to determine whether existing standards are meeting designated uses; and 4) in response to new and revised EPA requirements. The adopted revisions would satisfy this requirement. In addition, the rules are necessary to provide clarity and revise the standards and criteria by which the commission develops and authorizes discharge permits. The adopted standards found in these rules seek to protect public health, enhance water quality, and meet the purposes of the federal Clean Water Act, which is to restore and maintain the chemical, physical, and biological integrity of the nation’s waters.

Public Comment

A public hearing was held in Austin, Texas, on March 21, 2000. Forty-five individuals presented oral testimony. Much of the testimony at the hearing was related to the proposal to create a new segment in the Angelina River Basin with an intermediate aquatic life use. Those in general support of the change included the AFL-CIO of Texas, Angelina County, Angelina County Chamber of Commerce, Deep East Texas Development Association, Donohue Paper Company, Freshwater Anglers Association, City of Huntington, International Association of Machinists and Aerospace Workers, City of Lufkin, Lufkin Independent School District, Allied Chemical, and Energy Workers, Texas Forestry Association, Texas Forest Landowners Council, Texas Logging Council, and six individuals. Testimony opposing the change was presented by Clean Water Action of Texas, Lone Star Chapter of Sierra Club, National Wildlife Federation, Texas Association of Bass Clubs, Texas Committee on Natural Resources, and six individuals.

During the public comment period which closed on March 31, 2000 more than 6,000 additional comments were received on this issue in the form of post cards, petitions, form letters, and letters from both individuals and companies or organizations. Comments related to the proposed changes were also received from Senators Phil Gramm and Kay Bailey Hutchison as well as from Congressman Jim Turner, Senator Drew Nixon, Representative Jim McReynolds and locally-elected officials in Angelina County and the City of Lufkin. The staff recommends to adopt the segment changes and an intermediate aquatic life use for 0615, based upon the biological and chemical data collected.

Other issues which received substantial public comment related to the proposal were to clarify that habitat for aquatic life use is included in water quality standards, to adopt new indicator bacteria for contact recreation, and to adopt uses of seagrass propagation and wetlands water quality functions. The proposal to include habitat in provisions related to aquatic life use drew comments in opposition from a number of cities, the Texas Municipal League, Texas Metropolitan Sewerage Agencies, electric utilities, and others. The proposal was supported a large number of individual form letters as well as EPA, City of Austin, and a number of environmental advocacy groups. The staff recommends a modification of the proposal to address these concerns.

With respect to the proposed change in bacterial indicators a number of commenters supported the proposal in general. However, many commenters were very concerned about: (1) loss of historical database; (2) transition period to a new indicator; (3) use of data only when recreation is "suitable," since procedures on how to do this have not been defined; (4) potential substantial changes in listings of impaired waters; and (5) deletion of any criteria that apply only over the short term. The staff recommendation is to adopt the new criteria and add a single-sample criterion, and delay incorporating the exclusion of data at unsuitable times for swimming until the next standards revisions - but note that sampling will be conducted starting now so that future evaluations will have this kind of information available.

The proposal to clarify protection for seagrass propagation and wetland water quality functions received support in numerous form letters, from EPA, coastal interests, and environmental advocacy groups. Concern with regard to clarity on implementation of these provisions was expressed by several companies and organizations. The staff recommends adoption of proposed uses for seagrass propagation and wetland water quality functions.

Comments were also received concerning the definition of pollutant and storm water discharge. Several cities were concerned that the definition of pollutant excluded agricultural runoff. Others also noted that the definition was not sufficiently broad and should be replaced with pollution. The issue was also raised by several commenters with respect to the anti-degradation provisions. The staff recommends that the term “pollutant” be deleted and has included a definition for pollution to clarify this issue.

Comments related to human health criteria were also received. Several commenters were concerned about the inclusion of proposed criteria for perchlorate and atrazine, noting that ongoing research had not provided definitive information on the health effect level of these compounds. In the proposal there were several references to other agency documents and guidance documents which prompted comments with regard to agency policies and procedures and whether they should be developed as guidance documents or adopted as rules with formal public review and comment. The staff recommends that the criteria proposed for perchlorate and atrazine be deleted.

Final Regulatory Impact Analysis:

The staff has reviewed this rulemaking in accordance with the regulatory analysis requirements of the Texas Government Code, §2001.0225 and has determined that the rulemaking is not subject to §2001.0225. Although the rules do meet the definition of a “major environmental rule” as defined in the act, the rules do not meet any of the four applicability requirements listed in §2001.0225. The adopted rules do not exceed a standard set by federal law and is specifically required by state law (Texas Water Code, §26.023). The rules do not exceed an express requirement of state law and is required by federal law. The rulemaking does not exceed any requirement of a delegation agreement or contract between the state and any agency or representative of the federal government. The rulemaking is also being adopted under a specific statute, Texas Water Code, §26.023.

Takings Impact Assessment:

The staff has prepared a takings impact assessment for these rules pursuant to Texas Government Code, §2007.043. The following is a summary of that assessment. The Texas Surface Water Quality Standards (30 TAC Chapter 307) establish water quality standards for Texas streams, rivers, lakes, estuaries, and other waterbodies such as wetlands. The adopted revisions to the standards would incorporate new site-specific standards and would incorporate new data and criteria that would be used in resolving permit issues related to specific water bodies. The action would satisfy state statute requirements and federal Clean Water Act requirements. Promulgation and enforcement of these rules would not burden private real property which is the subject of these rules because the adopted amendments revising the state’s surface water quality standards do not limit or restrict a person’s use of private real property.

Coastal Management Program Consistency Review:

The staff has reviewed the rulemaking and found that the rules will affect an action/authorization identified in the Coastal Coordination Act Implementation Rules, 31 TAC §505.11, and will, therefore, require that applicable goals and policies of the Texas Coastal Management Plan (CMP) be considered during the rulemaking process. The staff has prepared a consistency determination for the rules pursuant to 31 TAC §505.22 and has found the rulemaking is consistent with applicable CMP goals and policies. Additionally, revisions to §307.2, Description of Standards; §307.3, Definitions and Abbreviations; §307.4, General Criteria; §307.5, Antidegradation;

§307.6, Toxic Materials; §307.7, Site-specific Uses and Criteria; §307.8, Application of Standards; §307.9, Determination of Standards Attainment; and §307.10, Appendices A-E as they pertain to water bodies; within the CMP boundary will need to be submitted to the Coastal Coordination Council for recertification.

Affected Agency Programs:

The Water Quality Planning and Assessment Section of the Technical Analysis Division is responsible for the long range planning for water quality standards. The Water Quality Assessment Section in the Water Permits and Resource Management Division is the principal section responsible for the technical development of specific standards. Field Operations, through their regional offices, is involved in conducting sampling and monitoring activities on water bodies in their areas. The Wastewater Permitting Section, with the assistance of the Water Quality Assessment Section, will use the standards and criteria in developing parameters for individual wastewater discharge permits. The TMDL team will coordinate their evaluations for the 303(d) list to ensure consistency with the state's water quality standards. The Surface Water Quality Monitoring Team will develop new assessment methods and monitoring needs to determine compliance with the standards.

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