

# Texas Commission on Environmental Quality

## Interoffice Memorandum

**To:** Commissioners **Date:** August 2, 2013

**Thru:** Bridget C. Bohac, Chief Clerk  
Zak Covar, Executive Director

**From:** L'Oreal W. Stepney, P.E., Deputy Director  
Office of Water

**Docket No.:** 2013-0544-RUL

**Subject:** Commission Approval for Proposed Rulemaking  
Chapter 307, Texas Surface Water Quality Standards  
Revisions to the Texas Surface Water Quality Standards  
Rule Project No. 2012-001-307-OW

### **Background and reason(s) for the rulemaking:**

Amendments are proposed to the Texas Surface Water Quality Standards (TSWQS), 30 TAC §§307.1 - 307.10. The proposed revisions are a result of a review of the TSWQS as required on a triennial basis by Federal Clean Water Act (FCWA), §303(c). The TSWQS were last revised in 2010, and significant portions of the 2010 TSWQS were approved by the United States Environmental Protection Agency (EPA) by 2012.

The revisions to the TSWQS are proposed to incorporate new information and studies on the appropriate uses and criteria of individual water bodies, to incorporate new scientific data on the effects of specific chemicals and pollutants, and to address new provisions in the Texas Water Code (TWC), federal regulations, and EPA guidance.

Specific proposed changes to the rules include:

- revisions to statewide toxic criteria to incorporate new data on toxicity effects, in order to address revised Texas Commission on Environmental Quality (TCEQ) and EPA procedures;
- additions and revisions to site-specific toxic criteria to incorporate local water quality data into criteria for selected water bodies;
- addition of industrial cooling areas and revisions to mixing zone provisions to facilitate implementation of thermal water quality standards in wastewater permitting;
- numerous revisions and additions to the uses and criteria, and descriptions of individual water bodies, to incorporate new data and the results of recent use attainability analyses (UAAs); and
- addition of site-specific recreational uses for selected water bodies, to incorporate results of recent recreational UAAs.

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**Scope of the rulemaking:**

**A.) Summary of what the rulemaking will do:**

The proposed revisions to the TSWQS include numerous substantive changes and clarifications in all sections of the rulemaking except for §307.1 and §307.5. The proposed revisions to the TSWQS incorporate new information and studies on the appropriate uses and criteria of individual water bodies, incorporate new scientific data on the effects of specific chemicals and pollutants, and address new provisions in the TWC, federal regulations, and EPA guidance.

The proposed revisions in §§307.2 - 307.4 and 307.6 - 307.9 are changes in the basic numerical and narrative provisions of the TSWQS that apply to all surface waters in the state. The numerous revisions and additions to site-specific uses and criteria in the Appendices of §307.10 are tailored to individual water bodies. These site-specific revisions are based on studies and evaluations of each water body, and UAAs have been conducted as needed to develop revisions in uses and/or associated numerical criteria.

**B.) Scope required by federal regulations or state statutes:**

The FCWA and associated EPA rules require states to review and, if appropriate, revise the TSWQS at least every three years. The TWC stipulates that the state may amend the standards from time to time.

These amendments are proposed under the TWC, §5.013(a)(3), relating to the TCEQ's general jurisdiction over the state's water quality program, and TWC, §26.023, which requires the TCEQ to by rule set TSWQS for all water in the state. These amendments are also being proposed under TWC, §5.103, which authorizes the TCEQ to adopt any rules necessary to carry out its powers and duties under the TWC and other laws of this state. The proposed amendments will satisfy the provision in FCWA, §303(c), which requires states to adopt water quality standards and to review and revise standards from time-to-time, but at least once each three-year period.

**C.) Additional staff recommendations that are not required by federal rule or state statute:**

- In §303.3, numerous definitions would be revised or added in order to improve clarity, including establishing biotic ligand models, and revising primary contact recreation to include handfishing, as defined by Texas Parks and Wildlife Code, Title 5, Subtitle B, §66.115.
- In §307.4, the addition of industrial cooling water areas to surface waters would specify that numerical temperature criteria would not apply in these areas.

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- In Table 2 of §307.6, revisions to numerous numeric toxic criteria to protect human health are recommended to incorporate updated EPA guidance procedures for calculating human-health criteria and to incorporate additional EPA data on toxic effects.
- In §307.7, language allowing fecal coliform to be used as an alternative bacteria indicator in high saline waters would be removed.
- In §307.8, revisions and additional specificity are proposed to clearly state that different mixing zones may apply to different types of numeric criteria, including temperature. Language is also added to specify that the 50-foot radius zone of initial dilution applies to the Gulf of Mexico as well as other large, tidal water bodies.
- In §307.9, language would be added to clarify standards attainment of chloride, sulfate, total dissolved solids, dissolved oxygen, and chlorophyll *a* standards.
- In §307.9, language would be added to allow the consideration of statistical variability when making attainment determinations for bacteria and biological integrity standards.
- In Appendices A, D, E, and G in §307.10, a large number of additions and revisions are proposed to site-specific uses and numerical criteria. These changes are based on new data and evaluations for individual water bodies, and a UAA is required by the EPA to support those changes that are less stringent than current water quality standards or presumed uses.
- Numerous other minor revisions are proposed throughout Chapter 307 to improve clarity and to provide additional specificity.

**Statutory authority:**

TWC, §§5.013, 5.103, and 26.023; and  
FCWA, §303(c)

**Effect on the:**

**A.) Regulated community:**

The TSWQS can directly affect permitted wastewater discharges in Texas including cities, counties, state agencies, water districts, utility districts, investor-owned utilities, river authorities, mobile home parks, recreational vehicle parks, hotels, motels, industries, campgrounds, or any other business with an industrial or domestic wastewater treatment facility.

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Revisions to site-specific standards may affect requirements in state, municipal, agricultural, and industrial wastewater discharge permits. These changes may involve alterations or new treatment methods or techniques that can range from best management practices to renovating, expanding, or building new treatment facilities. These permit holders may need to seek permit amendments to adjust treatment criteria to newly adopted standards. Small businesses that discharge wastewater would also be required to comply with the proposed requirements.

The rulemaking does not create a group of affected entities in the regulated community who were not affected previously. Numerous water quality uses and criteria are revised, but the scope and applicability of the rulemaking or affected permitting actions are not expanded with this proposal.

There will be a fiscal impact to some permitted facilities. Other facilities could benefit from this rulemaking because of cost savings. The proposed amendments have potential cost implications associated with revised criteria for toxic substances to protect human health and aquatic life, revised criteria for recreational uses, and revised dissolved oxygen criteria and aquatic life uses for classified and unclassified water segments.

The proposed amendments have cost implications associated with revised criteria for toxic substances to protect human health, revised criteria for recreational uses, and revised dissolved oxygen criteria and aquatic life uses for classified and unclassified water bodies. These cost implications are generally associated with chemical screening and monitoring and with the additional treatment of wastewater that may be needed to meet the standards for water quality. Dischargers may have to change or employ new wastewater treatment methods or techniques in order to meet the proposed standards.

The proposed changes in dissolved oxygen criteria are anticipated to affect some local governments that operate domestic wastewater facilities. In the absence of site-specific information, unclassified perennial water bodies are assigned a presumed high aquatic life use and associated dissolved oxygen criteria. None of the proposed revisions for dissolved oxygen criteria for classified or unclassified water bodies are anticipated to require more stringent treatment by domestic wastewater facilities. However, proposed changes for dissolved oxygen criteria for 12 classified or unclassified water bodies are less stringent and could facilitate future facility expansion for governmental entities. There are approximately 12 governmental domestic and two governmental industrial permitted wastewater dischargers on classified and unclassified segments that could be aided by the proposed less stringent revisions.

**B.) Public:**

For each year of the first five years the proposed rules are in effect, the public benefit anticipated from the changes in the proposed rules will be continued protection of public

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drinking water supplies and aquatic life resources, an improved regulatory process for permitted wastewater discharges, and improved quality of the surface water resources of the state.

The rulemaking does not create a group of affected parties from the general public who were not affected previously.

These proposed revised criteria are more protective of human health and provide a public benefit. The proposed revisions more accurately assess water quality in the state and revise requirements to protect human health and water quality. The proposed rules would substantially advance this stated purpose by adopting revised water quality criteria and requirements that are supported by site-specific studies, federal and state research, and statewide monitoring and sampling data. Promulgation and enforcement of these rules will not burden private real property that is the subject of the rules because the amendments revising the state's surface water quality standards do not limit or restrict a person's rights in private real property.

**C.) Agency programs:**

Several of the proposed revisions to the proposed site-specific revisions to criteria for individual water bodies in §307.10 are intended to reflect natural local conditions and application of water quality standards. In these cases, the proposed water quality standards can help streamline the water quality management programs of the TCEQ if restorative activities are not required under Total Maximum Daily Loads (TMDLs). Proposed changes may result in the removal of water bodies that appear on the current 303(d) *List of Impaired Water Bodies*. Removal of water bodies listed for dissolved oxygen and aquatic life impairments would eliminate the need for approximately 20 TMDL studies. Proposed changes for dissolved minerals and pH, in conjunction with the creation of a new segment (Rio Grande below Rio Conchos - Segment 2315) and its site-specific dissolved mineral criteria, would remove approximately 41 impairments from the list. Changes to designate site-specific contact recreation criteria would remove approximately 11 impairments. As a result of the proposed changes, the agency expects that it would reallocate its resources for other water quality management activities and initiatives.

The rulemaking does not create a group of affected agency programs who were not affected previously.

No additional costs are anticipated for the TCEQ to implement the revisions to the TSWQS. The revised water quality standards are primarily operational and procedural. The statewide monitoring and assessment of surface water quality data and the review of wastewater permit applications may need to incorporate numerous changes and additions.

**Stakeholder meetings:**

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Three stakeholder meetings were held at the TCEQ complex in Austin on the following dates: March 28, 2012; May 25, 2012; and November 07, 2012 (on nutrient criteria).

Other outreach efforts have included presentations at:  
Water Quality Advisory Group Quarterly Meetings  
TCEQ Environmental Trade Fair and Conference  
Numerous meetings of specific stakeholder groups

On average, approximately 60 people attended each meeting. Electronic notices of the stakeholder meetings were sent to the Surface Water Quality Standards Workgroup, which is a balanced group of regulated entities, public, environmental, consumer, and professional organization representatives; as well as to individuals interested in local water quality issues. Notice of the meetings was posted on the TCEQ TSWQS home page, with completed meeting minutes and follow-up information posted upon completion of each meeting.

Other interested parties or individuals who requested notification of stakeholder meetings were provided an open invitation to the meetings via written notice.

The proposed revisions were developed with extensive input and involvement from stakeholder participation in the water quality standards workgroups.

As a result of stakeholder comments, the existing Leon River (Segment 1221) would be split into two segments (Leon River Above Belton Lake – Segment 1259, and Leon River Below Lake Proctor – Segment 1221).

**Potential controversial concerns and legislative interest:**

- Mercury - In Table 2 of §307.6, the proposed mercury water column criteria of 0.0122 µg/L in freshwater and 0.0250 µg/L in saltwater reflect the values adopted by the Texas Natural Resource Conservation Commission (TCEQ predecessor) in 1995 and approved by the EPA on March 11, 1998. In 2010, TCEQ adopted a mercury criterion of 0.7 milligram per kilogram in fish tissue. This criterion was disapproved by EPA in a letter dated June 29, 2011, thereby making the most recently-approved criteria applicable for regulatory purposes. In its letter, EPA stated that it may promulgate its criterion recommendation of 0.3 milligram per kilogram if TCEQ did not adopt a revised mercury human health criterion.
- Contact Recreation in the Leon River Watershed - Several workgroup members expressed concerns regarding the proposed changes from the primary contact recreational uses and criteria for water bodies in the Leon River watershed. Stakeholders were concerned that the proposed changes in criteria for South Leon, Resley, and Indian Creeks were not protective due to the presence of existing primary contact recreation and availability of access for recreation. Additionally, stakeholders were concerned the

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proposals to retain primary contact recreation for the Leon River Below Lake Proctor and Pecan Creek were too stringent.

- Rio Grande - There is significant interest regarding site-specific changes to the dissolved minerals criteria of the Rio Grande Above Amistad Reservoir (Segment 2306), as well as the creation of the new classified segment Rio Grande Below Rio Conchos (Segment 2315), due to the shared boundary with Mexico. Proposed changes to the dissolved minerals criteria and segment boundaries are warranted to better reflect the local conditions of the water body and to incorporate the influence of natural springs on water quality.
- Temperature - As a result of a permitting issue that arose after the two Surface Water Quality Standard Advisory Workgroup meetings were held on March 28 and May 25, 2012, proposed revisions were included to allow exemptions from temperature criteria. These exemptions will apply in industrial cooling water areas as defined in the rule.

**Will this rulemaking affect any current policies or require development of new policies?**

The TSWQS establish state goals and targets for water quality. For individual water bodies, the standards assign water quality-related uses and specify associated numerical criteria to protect the assigned uses. In addition, some narrative and numerical criteria are applied statewide, and the TSWQS also includes procedures on how water quality standards are applied and assessed. This rulemaking will not require the development of new policies.

**What are the consequences if this rulemaking does not go forward? Are there alternatives to rulemaking?**

The proposed revisions are a result of a review of the TSWQS as required on a triennial basis by Federal Clean Water Act (FCWA), §303(c). The TSWQS establish the water quality conditions for surface water in the state. TSWQS are the basis for establishing discharge limits in wastewater and stormwater discharge permits, setting instream water quality goals for TMDLs, and providing water quality targets to assess water quality and identify impaired water bodies.

If this rulemaking is not approved, these different TCEQ water programs would be addressing water quality standards that have been shown to be inappropriate for some water bodies

An alternative to state rulemaking is EPA promulgation of federal water quality standards for Texas.

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**Key points in the proposal rulemaking schedule:**

**Anticipated proposal date:** 8/21/13

**Anticipated *Texas Register* publication date:** 9/6/13

**Public hearing date (if any):** 10/17/13

**Public comment period:** 9/6/13 to 10/24/13

**Anticipated adoption date:** 2/5/14

**Agency contacts:**

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**Attachments**

None.

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