

**JOINT RESOLUTION REGARDING THE TRIENNIAL REVIEW OF THE TEXAS
SURFACE WATER QUALITY STANDARDS**

WHEREAS, the Water Environment Association of Texas ("WEAT"), a member association of the Water Environment Federation ("WEF"), is a nonprofit organization made up of individual members interested in advancing the science of water quality management; and

WHEREAS, the Texas Association of Clean Water Agencies ("TACWA"), a member association of the National Association of Clean Water Agencies ("NACWA"), is a nonprofit organization made up of wastewater utilities across the State of Texas likewise interested in advancing the science of water quality management and wastewater collection and treatment; and

WHEREAS, the Texas Water Conservation Association ("TWCA") is a statewide nonprofit organization made up of individuals, firms, corporations, cities, water districts and authorities, public and private agencies, and groups dedicated to the task of conserving, developing, protecting, and utilizing the water resources of Texas for beneficial purposes; and

WHEREAS, the Texas Municipal League ("TML") is a nonprofit organization representing the interests of cities across the State of Texas as those interests relate to a host of matters, including but not limited to water quality management; and

WHEREAS, WEAT, TACWA, TWCA and TML (collectively the "Parties") share a common goal of promoting environmental stewardship, sound science, and efficient government in developing regulations related to water quality management; and

WHEREAS, representatives of the Parties have been participating in stakeholder meetings and discussions with the Texas Commission on Environmental Quality ("TCEQ") regarding the TCEQ's triennial review and revision of the Texas Surface Water Quality Standards (Title 30, Texas Administrative Code, Chapter 307) (the "TSWQS") and Procedures to Implement the Texas Surface Water Quality Standards (the "IPs"); and

WHEREAS, the Parties desire to work with the TCEQ to the fullest extent to provide information and assistance in the adoption of appropriate and relevant TSWQS and IPs; and

WHEREAS, in the interest of providing a common position on certain matters related to surface water quality management, and to provide recommendations to the TCEQ as it proceeds with its review and revision of the TSWQS and IPs, the Parties desire to enter into this resolution (the "Resolution") regarding common principles and recommendations related to the adoption and implementation of appropriate TSWQS and IPs.

NOW THEREFORE, the Parties are hereby resolved and do adopt the following principles related to establishing and implementing surface water quality standards relating to bacteria and nutrients, and for the implementation of Whole Effluent Toxicity ("WET") limits in TSWQS and Texas Pollutant Discharge Elimination System ("TPDES") permits:

1. Surface Water Quality Standards for Water-Based Recreation (Bacteria)

Surface water quality standards to protect recreational uses should be revised to embody the following principles:

- A tiered set of recreational uses should be defined and incorporated into the TSWQS that recognizes the true range of variation in recreational activities. The tiers should be created considering the relative amount of water exposure (contact and ingestion) so that uses (activities) with a relatively low potential for water exposure, such as bank fishing and boating, are distinct and separate from those uses (activities) with a higher potential for water exposure, such as full head-immersion swimming. Possible uses (activities) could include swimming, wading, fishing, and boating;
- Criteria to protect the tiered set of uses should be based on an appropriate exposure assessment wherein numeric criteria are inversely proportional to the amount of exposure to water;
- Criteria appropriate for the type of waterbody should be developed to protect each use (activity). Criteria applied to a large fresh water lake should not be applied to a shallow stream with substantially different physical conditions and uses;
- The TCEQ should identify specific waterbodies that should be designated as noncontact recreation uses (e.g., designated wildlife areas, navigation, drainage or irrigation channels, etc.);

- The TCEQ should develop and adopt recreational use attainability analysis ("UAA") procedures along with review and acceptance procedures to allow stakeholders to more accurately identify applicable waterbody uses under the new tiered system;
- The TCEQ should also conduct research to advance our knowledge of waterborne illnesses, the occurrence of pathogens in surface waters, and the human health risks present in Texas waterbodies with indicator organisms present. This effort could build on the epidemiology work performed by the Water Environment Research Foundation and others and would help with future triennial review changes; and
- The TCEQ should fully implement existing provisions of the TSWQS (307.7(a)) that allow the agency to refrain from listing waterbodies as impaired if the exceedance of a criterion is based on naturally occurring conditions.

2. Surface Water Quality Standards in Relation to Eutrophication (Nutrient) Criteria

The parties recognize that some waters exhibit undesirably elevated levels of algae and/or aquatic plant growth, characterized as eutrophication, and that addressing this concern is an important water quality management function. In addition, the parties recognize that current TCEQ efforts related to eutrophication (nutrient) criteria have focused on reservoirs. Consequently, our recommendations also focus on these criteria as they relate to reservoirs. The parties recognize additional work will be performed to develop criteria for other types of waterbodies (e.g., rivers, streams, estuaries, etc.) and may amend these recommendations to reflect this additional work in the future. Accordingly, the parties recommend the following:

- The TCEQ should use chlorophyll α measurements to assess waterbodies (in this case, reservoirs) and should develop numerical criteria based on chlorophyll α ;
- When assessing waters with respect to chlorophyll α , the TCEQ should assess the water quality using the median value of the data collected over at least a five-year period. The data set should contain at least ten samples taken over at least two different years. In reservoirs, the TCEQ should base the assessment on samples collected from the station on which the original criterion was based. This station should be located in the main pool of the reservoir nearest the downstream dam;
- Because of significant changes in the analytical methods that were implemented in the early 1990's, only data collected from 1995 forward should be used for the establishment of criteria, except in those cases where the validity of the older data is verified;

- The TCEQ should ensure that the TSWQS clearly state that eutrophication-related criteria, when applied to reservoirs, should only apply to the main body of the reservoir, near the dam, in the vicinity of the station used to develop the criteria. This is important because many reservoirs exhibit a strong concentration difference between the main body and upper reaches, and not considering these differences could result in costly errors;
- With regard to implementation of eutrophication-related criteria, the TCEQ should ensure that permit evaluations, related modeling, and permitting decisions are based on the response variable, which is chlorophyll *a* in the case of reservoirs, and not try to limit the absolute concentrations of nutrients within the waterbody. For example, TCEQ's analysis of the nutrient criteria for permitting should model the response of the waterbody's chlorophyll *a* concentrations to varying phosphorus inputs. This recommended approach is different than trying to control the phosphorus levels within the receiving waterbody to certain, absolute levels; and
- If water quality criteria are adopted for phosphorus in addition to chlorophyll *a*, the TCEQ should ensure that phosphorus is not the sole reason for determining that a reservoir is non-compliant with the TSWQS, for 303(d) listings.

3. Surface Water Quality Standards and Implementation for Whole Effluent Toxicity

The TCEQ is urged to continue the current approach included in the TSWQS and IPs for Whole Effluent Toxicity ("WET") given that there has been no evidence that the current program is not protective of waters of the state. The Environmental Protection Agency (EPA) has consistently approved the TCEQ WET program since 1995. There has been no change in the WET requirements in either the Clean Water Act or EPA regulations since 1995. The current approach is appropriate because it takes into account the variability of a test that relies on the responses of living organisms. There is significant test variability that is solely attributable to the variation in sensitivity among individual organisms. This is especially true of sublethal tests.

The key features of the current approach are as follows:

- The standard practice, as set forth in the IPs, is to base the requirement for a permittee to conduct a Toxicity Reduction Evaluation (TRE) on lethal, not sublethal, test responses. However, the TSWQS and IPs provide TCEQ with the ability to require a permittee to perform a TRE for sublethal test responses, if the agency determines such action is warranted;
- Permit limits are not established for WET unless there is a reasonable potential for instream impacts as evidenced by consistent lethal test responses and an inability to conduct a successful TRE that identifies a means to eliminate the cause of the lethal test responses; and
- On the occasions when a permit limit for WET is justified, permit limits are established based on the occurrence of lethal test responses and not sublethal test responses.

The Parties appreciate the hard work of the TCEQ's staff on these important revisions to the TSWQS and look forward to working with the agency in the near future.

**WATER ENVIRONMENT
ASSOCIATION OF TEXAS**



Carol Batterton
Executive Director

12-6-07

Date

**TEXAS ASSOCIATION OF
OF CLEAN WATER AGENCIES**



Willie Horton, P.E.
President

10 Dec 07

Date

**TEXAS WATER
CONSERVATION ASSOCIATION**



John Burke
President

Dec 12, 2007

Date

TEXAS MUNICIPAL LEAGUE



Frank Sturzl
Executive Director

Date