

The Texas Commission on Environmental Quality (TCEQ, agency, or commission) adopts the amendments to §311.61 and §311.62; and new §311.67.

Section 311.61 is adopted *with change* to the proposed text as published in the July 4, 2014, issue of the *Texas Register* (39 TexReg 5102). Section 311.62 and §311.67 are adopted *without changes* to the proposed text and will not be republished.

### **Background and Summary of the Factual Basis for the Adopted Rules**

On February 6, 2013, the Tarrant Regional Water District (petitioner or TRWD) filed a petition for rulemaking that proposed amending §311.61 and §311.62 and adding §311.67, to correct the definitions of "Benbrook Lake watershed" and "Benbrook Lake water quality area," and require an effluent limit of 1.0 milligram per liter (mg/L) for total phosphorus for new or amended domestic wastewater discharges to the Benbrook Lake water quality area and Benbrook Lake watershed, based on discharge flow volume and location. In addition to correcting definitions, the purpose of the petitioner's requested rulemaking was to protect water quality in Benbrook Lake by limiting additional nutrient enrichment in the reservoir and the associated problems that enrichment can cause.

The petitioner provided several lines of support to justify the proposed rulemaking. The petitioner took part in a regional wastewater treatment needs study that projected increasing volumes of domestic wastewater through the year 2030 due to expected

population growth in the Benbrook Lake watershed. Using a water quality simulation model, the study estimated the effluent quality requirements necessary to protect water quality in the lake. The evaluation predicted that requiring a total phosphorus effluent limit of 1.0 mg/L would prevent lake concentrations of the nutrient-loading response variable chlorophyll-*a* from increasing significantly beyond the TCEQ-proposed chlorophyll-*a* criterion for Benbrook Lake.

The petitioner also sponsored a study of trends in the water quality data collected from Benbrook Lake. The study found significant increasing trends in concentrations of chlorophyll-*a*, total phosphorus, and total nitrogen in the lake. It was expected that the proposed effluent limit for total phosphorus would lessen the upward trend of lake chlorophyll-*a* concentrations. The petitioner also noted that the TCEQ Texas Water Quality Integrated Report has reported chlorophyll-*a*, or excessive algal growth concerns, in Benbrook Lake in all biennial report years dating back to 2002.

Furthermore, the petitioner used a soil and water analysis model of the watersheds of two of its other system reservoirs to demonstrate that most (over 80%) of the phosphorus generated by point and nonpoint sources in the watersheds is delivered to the reservoirs, indicating the potential effectiveness of phosphorus control for additional wastewater loading to the lake. The model results were also linked to the water quality simulation tool and showed that the reservoirs were most sensitive to cumulative loads as opposed to individual loadings.

The petitioner lastly reviewed the TCEQ's procedures for evaluating on a permit-by-permit basis the need for phosphorus effluent limits. The petitioner indicated that the TCEQ procedures do not adequately take into account water quality trends, anticipated future wastewater loading, and cumulative impacts from other wastewater discharges. In addition, the evaluation of individual discharges using TCEQ procedures in certain cases may not result in the recommendation of total phosphorus effluent limits for the targeted new or increasing discharges of 0.1 million gallons per day (MGD) or greater in the Benbrook Lake water quality area and 0.25 MGD or greater in the Benbrook Lake watershed.

The TCEQ reviewed the information provided by the petitioner and agrees that the rulemaking is an effective approach to further protect water quality in Benbrook Lake.

### **Section by Section Discussion**

#### *§311.61, Definitions*

The commission adopts the amended references to "Lake Benbrook," which are corrected to reflect the reservoir's proper name, Benbrook Lake. To that end, the terms "Lake Benbrook water quality area" and "Lake Benbrook watershed" are renamed "Benbrook Lake water quality area" and "Benbrook Lake watershed," respectively. This change also necessitated a change in the alphabetical order and numeric sequencing of

definitions, specifically, paragraphs (2) - (10). The water quality area definition contains two references to "Lake Benbrook" that are changed to "Benbrook Lake." The one reference to "Lake Benbrook" in the watershed definition is changed to "Benbrook Lake." The definition of "Benbrook Lake water quality area" is reworded in response to TRWD's comment to provide further clarity regarding the area's boundary. The definition of "Benbrook Lake watershed" is revised to correct an error in the current definition. The current definition sets the upper watershed boundary as "a point 200 meters downstream from U.S. 337 in Tarrant County." U.S. 337 is a nonexistent highway, and if U.S. Highway 377 was the intended reference, the resulting watershed area would be smaller than the water quality area, which is inconsistent with the relationship between the watersheds and water quality areas of the other reservoirs included in Subchapter G. The revised definition of "Benbrook Lake watershed" clearly establishes the watershed boundary as the lake and its tributaries except for the upstream reservoir, Lake Weatherford, and that reservoir's tributaries.

*§311.62, Scope*

The commission adopts amended §311.62, to accommodate the addition of §311.67, Nutrient Control, which institutes a total phosphorus limit for certain discharges into the Benbrook Lake water quality area and watershed. The original scope of the subchapter focused only on discharges to reservoir water quality areas, so an exception was added for §311.67. The phrase "and discharges directly into these lakes" is removed from the

original scope statement because it is unnecessary. The definition of each of the other reservoir water quality areas includes the reservoir itself. An additional sentence is added to §311.62 to indicate that §311.61 and §311.66 also apply to discharges to the Benbrook Lake watershed. A clarifying statement is added to the end of §311.62 that limits the scope of §311.67 only to discharges into the Benbrook Lake water quality area and watershed.

*§311.67, Nutrient Control*

The commission adopts new §311.67. Subsection (a) requires a daily average effluent limit for total phosphorus of 1.0 mg/L for domestic wastewater discharges, from treatment systems other than oxidation pond systems, into either the Benbrook Lake watershed or water quality area. Discharges into the Benbrook Lake watershed with a permitted flow less than 0.25 MGD, and discharges into the Benbrook Lake water quality area, with a permitted flow less than 0.10 MGD, are exempt from the effluent limit requirement. Subsection (b) stipulates that for discharge permits with multiple flow phases, the requirements of subsection (a) apply only to qualifying flow phases. Subsection (c) further clarifies that for permits with more than one discharge outfall, the permitted flow for all the outfalls would be combined to determine if the permit meets the flow criteria of subsection (a). Subsection (d) further limits the applicability of subsection (a) to new discharge permits and existing permits that increase the permitted flow of the discharge.

### **Final Regulatory Impact Analysis Determination**

The commission reviewed the rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225 and determined that the rulemaking is not subject to Texas Government Code, §2001.0225 because it does not meet the definition of a "major environmental rule" as defined in the Administrative Procedure Act. A "major environmental rule" is a rule the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The intent of the rulemaking is to establish a phosphorus limit for discharge permits when the permittee is discharging into the Benbrook Lake watershed or Benbrook Lake water quality area, depending on the permit's flow volume limit. The specific intent of the rulemaking is to amend the commission's rules to establish a phosphorus limit that does protect the environment and reduces risks to human health from environmental exposure but that will not adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. Therefore, the rulemaking does not meet the definition of a "major environmental rule."

Even if the rulemaking was a major environmental rule, Texas Government Code,

§2001.0225 still would not apply to this rulemaking because Texas Government Code, §2001.0225 only applies to a major environmental rule, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law. This rulemaking does not meet any of these four applicability criteria because it: 1) does not exceed a standard set by federal law; 2) does not exceed an express requirement of state law; 3) does not exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; and 4) is not adopted solely under the general powers of the agency but rather specifically under Texas Water Code (TWC), §26.0135, which authorizes the commission to monitor and assess the water quality of each watershed in the state; TWC, §26.027, which authorizes the commission to issue permits; and TWC, §26.121, which authorizes the commission to prohibit unauthorized discharges. Therefore, this rulemaking does not fall under any of the applicability criteria in Texas Government Code, §2001.0225.

The commission invited public comment regarding the draft regulatory impact analysis determination during the public comment period. No comments were received regarding

the draft regulatory impact analysis determination.

### **Takings Impact Assessment**

The commission evaluated this rulemaking and performed an analysis of whether it constitutes a taking under Texas Government Code, Chapter 2007. The specific purpose of this rulemaking is to establish a phosphorus limit that will apply to wastewater discharges into the Benbrook Lake watershed and water quality area. The rulemaking will substantially advance this stated purpose by adding a daily average phosphorus limit of 1 mg/L that will only apply to discharges into the Benbrook Lake watershed and water quality area to Chapter 311, Subchapter G of the commission's rules.

The commission's analysis indicates that Texas Government Code, Chapter 2007 does not apply to this rulemaking because this is an action that is reasonably taken to fulfill an obligation mandated by federal law, which is exempt under Texas Government Code, §2007.003(b)(4). The commission has been delegated as the regulatory agency that administers the state National Pollutant Discharge Elimination System program under federal Clean Water Act, §402 and, therefore, is responsible for establishing effluent limitations to protect water quality in a specific portion of a navigable water to protect public health, public water supplies, agricultural and industrial uses, wildlife, and recreational activities under federal Clean Water Act, §302.

Nevertheless, the commission further evaluated this rulemaking and performed an assessment of whether it constitutes a taking under Texas Government Code, Chapter 2007. Promulgation and enforcement of this rulemaking will be neither a statutory nor a constitutional taking of private real property. Specifically, the subject regulations do not affect a landowner's rights in private real property because this rulemaking does not burden nor restrict or limit the owner's right to property and reduce its value by 25% or more beyond that which would otherwise exist in the absence of the regulations. In other words, this rulemaking requires compliance with a phosphorus effluent limitation related to discharges into the Benbrook Lake watershed and water quality area without burdening nor restricting or limiting the owner's right to property and reducing its value by 25% or more. Therefore, the rulemaking does not constitute a taking under Texas Government Code, Chapter 2007.

### **Consistency with the Coastal Management Program**

The commission reviewed the adopted rules and found that they are neither identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(2) or (4), nor will they affect any action/authorization identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(a)(6). Therefore, the adopted rules are not subject to the Texas Coastal Management Program (CMP).

The commission invited public comment regarding the consistency with the CMP during

the public comment period. No comments were received on the CMP.

### **Public Comment**

The commission held a public hearing on July 24, 2014, in Austin. The comment period closed on August 4, 2014. The commission received one written comment from TRWD.

### **Response to Comments**

#### Comment

TRWD commented that while they generally agree with the proposed changes to the rules, the definitions of "Benbrook Lake watershed" and "Benbrook Lake water quality area" should be reworded to avoid potential ambiguities. The suggested Benbrook Lake water quality area definition is "the Benbrook Lake watershed except for those portions that are more than five stream miles upstream of the pool level of Benbrook Lake (694.0 feet, mean sea level)." The suggested Benbrook Lake watershed definition is "Benbrook Lake and its tributaries except Lake Weatherford and tributaries above Lake Weatherford."

#### **Response**

**The TCEQ agrees with this comment and has incorporated the suggested revisions into adopted §311.61. To provide greater clarity, the TCEQ inserted the word "the" before the second occurrence of the word**

**"tributaries" in the amended definition of "Benbrook Lake watershed."**

**SUBCHAPTER G: LAKES WORTH, EAGLE MOUNTAIN, BRIDGEPORT,  
CEDAR CREEK, ARLINGTON, BENBROOK AND RICHLAND-CHAMBERS  
§§311.61, 311.62, 311.67**

**Statutory Authority**

This rulemaking is adopted under Texas Water Code (TWC), §5.102, which establishes the commission's general authority necessary to carry out its jurisdiction; TWC, §5.103, which establishes the commission's general authority to adopt rules; TWC, §5.105, which establishes the commission's authority to set policy by rule; TWC, §5.120, which requires the commission to administer the law so as to promote the conservation and protection of the quality of the state's environment and natural resources; TWC, §26.0135, which authorizes the commission to monitor and assess the water quality of each watershed and river basin in the state; TWC, §26.023, which authorizes the commission to set water quality standards for water in the state by rule; TWC, §26.027, which authorizes the commission to issue permits; and TWC, §26.121, which provides the commission's authority to prohibit unauthorized discharges.

The adopted rulemaking implements TWC, §§26.0135, 26.023, 26.027, and 26.121.

**§311.61. Definitions.**

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

(1) BOD<sub>5</sub>--Biochemical oxygen demand (five-day).

(2) Benbrook Lake water quality area--The Benbrook Lake watershed except for those portions that are more than five stream miles upstream of the pool level of Benbrook Lake (694.0 feet, mean sea level).

(3) Benbrook Lake watershed--Benbrook Lake and its tributaries except Lake Weatherford and the tributaries above Lake Weatherford.

(4) Cedar Creek reservoir water quality area--Those portions of the Cedar Creek Reservoir watershed within five stream miles upstream of the pool level of Cedar Creek Reservoir (322.0 feet, mean sea level).

(5) Cedar Creek Reservoir watershed--Cedar Creek Reservoir and its tributaries located between Joe B. Hoggsett Dam and a point along Cedar Creek up to the normal pool elevation.

(6) DO--Dissolved oxygen.

(7) Eagle Mountain Lake water quality area--Those portions of the Eagle Mountain Lake watershed within five stream miles upstream of the pool level of Eagle Mountain Lake (649.1 feet, mean sea level).

(8) Eagle Mountain Lake watershed--Eagle Mountain Lake and its tributaries located between Eagle Mountain Dam and a point 0.6 kilometers downstream from the confluence of Oates Branch.

(9) Lake Arlington water quality area--Those portions of the Lake Arlington watershed within five stream miles upstream of the pool level of Lake Arlington (550.0 feet, mean sea level).

(10) Lake Arlington watershed--Lake Arlington and its tributaries located between Arlington Dam up to the normal pool elevation along Village Creek.

(11) Lake Bridgeport water quality area--Those portions of the Lake Bridgeport watershed within five steam miles upstream of the pool level of Lake Bridgeport (836.0 feet, mean sea level).

(12) Lake Bridgeport watershed--Lake Bridgeport and its tributaries located between Bridgeport Dam to a point immediately upstream from the confluence of Bear Hollow.

(13) Lake Worth water quality area--Those portions of the Lake Worth watershed within five stream miles upstream of the pool level of Lake Worth (594.3 feet, mean sea level).

(14) Lake Worth watershed--Lake Worth and its tributaries located between Lake Worth Dam and a point 4.0 kilometers downstream from Eagle Mountain Dam.

(15) Mg/liter--Milligram per liter.

(16) Oxidation pond system--Facility in which oxidation ponds are the primary process used for secondary treatment and in which the ponds have been designed and constructed in accordance with applicable design criteria.

(17) Richland-Chambers reservoir water quality area--Those portions of the Richland-Chambers Reservoir watershed within five stream miles upstream of the pool level of Richland-Chambers Reservoir (315.0 feet, mean sea level).

(18) Richland-Chambers watershed--Richland-Chambers Reservoir and its tributaries located between Richland Creek Dam and a point along Richland Creek up to the normal pool level.

(19) TSS--Total suspended solids.

**§311.62. Scope.**

Except for §311.67 of this title (relating to Nutrient Control), this subchapter applies to discharges into the water quality areas of Lakes Worth, Eagle Mountain, Bridgeport, Cedar Creek, Arlington, Benbrook, and Richland-Chambers. Section 311.61 and §311.66 of this title (relating to Definitions; and More Stringent Requirements, respectively) also apply to the Benbrook Lake watershed. Section 311.67 of this title only applies to discharges to the Benbrook Lake watershed and Benbrook Lake water quality area.

**§311.67. Nutrient Control.**

(a) Domestic wastewater discharges from wastewater treatment systems, other than oxidation pond systems, must meet a daily effluent limit for total phosphorus of 1.0

milligram per liter, based on a 30-day average, if the wastewater treatment system:

(1) has a permitted annual or daily average flow greater than or equal to 0.10 million gallons per day and a discharge point located in the Benbrook Lake water quality area; or

(2) has a permitted annual or daily average flow greater than or equal to 0.25 million gallons per day and a discharge point located in the Benbrook Lake watershed, but outside the Benbrook Lake water quality area.

(b) For discharge permits with more than one flow phase, the effluent limit requirements in subsection (a) of this section apply only to those flow phases that meet the flow requirements in subsection (a) of this section.

(c) For wastewater treatment systems with more than one outfall, the permitted flow limits for all outfalls will be combined to determine if the system meets one of the flow requirements in subsection (a) of this section.

(d) This section only applies to wastewater treatment systems that apply for a new discharge permit or a discharge permit amendment to increase permitted flow after January 1, 2015.