



October 30, 2009

LaDonna Castanuela, Chief Clerk  
Texas Commission on Environmental Quality  
MC 150  
P.O. Box 13087  
Austin, Texas 78711-3087

RE: Petition for Repealing 30 TAC Chapter 311, Subchapters A, B and F  
(Docket No. 2009-1586-RUL)

Dear Ms. Castanuela:

As a steward of the Colorado River, the Lower Colorado River Authority (LCRA) is greatly concerned about and appreciates the opportunity to comment on the petition before the Texas Commission on Environmental Quality (TCEQ) to repeal Chapter 311, subchapters A, B, and F. The water quality of the Highland Lakes has been protected under Chapter 311 for 23 years. Any change to this chapter needs to be carefully evaluated.

LCRA opposes and respectfully requests that the Commission deny the petition until such time it can be scientifically proven that the Highland Lakes, a drinking water source for more than 1 million people and economic engine for Central Texas, would be protected under a repeal of the discharge ban rule with no degradation to current water quality.

In lieu of repealing the rules, LCRA would support TCEQ setting up a stakeholder process so interested parties could work together to seek solutions. LCRA is offering TCEQ its resources to support such a stakeholder process.

I am attaching LCRA's formal comments on the petition and appreciate your consideration. If you have questions or comments, please call me at (512) 473-3283 or Lisa Hatzenbuehler, Manager of Water Resource Protection, at (512) 473-4082.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom G. Mason", written in a cursive style.

Thomas G. Mason  
General Manager

## **LCRA's formal comments on the petition before the Texas Commission on Environmental Quality (TCEQ) to repeal Chapter 311, Subchapters A, B, and F**

### **Colorado River Environmental Model**

LCRA has developed a water quality model, the Colorado River Environmental Model, for use in determining the potential impact of various conditions on the water quality in Lake Travis. The model is calibrated, peer reviewed, widely accepted in the scientific community and more comprehensive than most models being used to evaluate future water quality under various scenario. LCRA has tested the model and is confident the results can be used to guide policy and protect water quality. We have demonstrated the capabilities of the model to TCEQ staff and offer the model as resource during this process. Additionally, the stakeholder process will allow time for the next phase of the model to be completed. This model will include lakes Marble Falls, LBJ, and Inks so that proposed changes to the rules can be fully evaluated for those lakes as well.

### **General Comments**

The water quality of the Highland Lakes ranges from good to excellent due to a variety of proactive water quality protection programs. The combination of the Chapter 311 rules, LCRA's On-site Sewage Facilities Program, LCRA's Highland Lakes Watershed Ordinance program, the Clean Rivers program, the Colorado River Watch Network and partnerships with communities around the Highland Lakes have helped protect water quality. Despite these programs, data collected through the Clean Rivers program indicate changes in water quality over the past 20 years. Data indicates that nutrient and chlorophyll levels have been trending upward, while lake clarity has been decreasing. In addition, a preliminary review of the TCEQ proposed nutrient criteria indicate current algal concentrations in the Highland Lakes are at the proposed criterion level for each reservoir, indicating that the reservoirs do not have the capacity to assimilate additional nutrients without violating the proposed standard.

The City of Leander, one of the petitioners, already has a regional solution to dispose of its wastewater in the Brushy Creek Regional Wastewater System. The idea of regionalizing wastewater treatment is fully supported by TCEQ policy and encouraged regularly. Repealing the discharge ban would allow Leander to opt out of the already available regional solution and would allow yet another small package plant to directly discharge to Lake Travis, contrary to state policy.

### **Specific Comments to the Petition Filed**

#### **Public Policy**

The stated interest of the petition is furthering the statewide public policy of efficiently using and conserving existing water resources. Petitioners state that centralized collection and treatment is difficult if not impossible under Chapter 311 and an ad hoc approach of hundreds if not thousands of septic systems have the potential to negatively impact water quality.

As part of its stewardship role, LCRA staff reviews all TCEQ water quality permits in our jurisdictional watershed to ensure that water quality is protected. While we can appreciate the challenge in planning and permitting land application permits around the Highland Lakes, there are more than 30 permitted land application wastewater treatment plants around Lake Travis, and some have generated revenues from beneficial reuse.

LCRA has been a TCEQ-authorized agent implementing and enforcing septic regulations within 2,200 feet of the Highland Lakes since 1971. Furthermore, the 200 feet closest to the four upper Highland Lakes is identified in the Rules as the restricted zone, with more stringent standards than in the remainder of LCRA's regulatory area or in the state standards. LCRA has interlocal agreements whereby LCRA administers and enforces septic regulations within the city limits of Lakeway, Lago Vista, Jonestown, Granite Shoals, and Sunrise Beach in addition to LCRA's jurisdictional area. TCEQ staff implementing the state on-site sewage facilities rules believe if properly sited, designed, installed, and managed over their service lives, septic systems can and do meet both public health and environmental protection goals in areas where centralized treatment is impractical or not cost-effective.

Improvements in OSSF technology, design, construction, and management should be considered when evaluating the impact of on-site systems. Aerobic treatment units, which produce secondary quality effluent, have proliferated in Central Texas and around the lakes. Most of these are maintained by trained professionals licensed by the TCEQ. Additionally, the disposal of effluent into shallow, low-pressure dosed drain fields as well as drip irrigation drain fields offers greater environmental protection and uptake by vegetation. More than one-half of the systems installed around the Highland Lakes are designed by professional engineers or registered sanitarians.

LCRA does not receive numerous or consistent complaints relating to system failures within any given area around the lakes. It is likely that the few system failures that occur with older properties are due to the fact that during the last 38 years LCRA has found and addressed numerous substandard pre-1971 conditions.

A review of sale re-inspection report summaries for 2007 and 2008, which include a total of 1,130 systems, indicates that only 1 percent (12 out of 1,130 systems) of systems was found to have any degree of surfacing effluent.

### **Technology Advances in Wastewater Treatment**

The petition claims there have been technological advances in the area of wastewater treatment and that current land application is not a beneficial use. LCRA's primary concern is the increased nutrient contribution wastewater treatment plants could contribute to reservoirs already experiencing an increasing trend in nutrient levels. LCRA agrees that there have been technological advances since 1986 in wastewater treatment. What has not been evaluated consistently is what impact those advanced treatment operations have on receiving waters, which in some cases are unclassified segments in the basin. Unclassified segments do not have water quality standards by

which to measure degradation. Potential impacts to human health are unclear and warrant further study.

Furthermore, emerging contaminants such as pharmaceuticals and the potential of those being discharged into the lakes are of concern. Recent U.S. Geological Survey studies indicate these contaminants are becoming more prevalent in drinking water supplies receiving wastewater discharges. Discharged pharmaceuticals are also linked to reproduction abnormalities in several species of fish, posing significant risk to fishery resources.

30 TAC Chapter 210 promotes beneficial reuse and should be recognized as a valuable way to reuse wastewater to benefit the environment. The petition cites the irrigation of juniper ash, or cedar, as bad land management practices it is counter productive to conservation initiatives. LCRA would agree that, while allowed by the rules, juniper irrigation it is not the most efficient way to use reclaimed water. Irrigating cedars is one option under the current rules; however the rules do not require irrigation of cedar trees and allow a number of options from which to choose, many of which are truly beneficial and promote conservation of potable water. Most communities irrigate golf courses, parkland, natural vegetation, and hay fields with reclaimed water.

### **Supplemental Water Supply**

The petition cites direct discharges into the Highland Lakes will increase water supplies. LCRA is keenly aware of water supply issues and has long been active with the Texas Water Development Board Regional Water Plan development in Region K. Additionally, LCRA has developed a 100-year Water Resource Supply Plan, with extensive public input, for the lower Colorado River basin. The plan includes a number of different options for enhancing water supply but did not identify direct discharge of wastewater into the Highland Lakes as viable and a potential source of water. Issues surrounding the potential of lifting the discharge ban and the amount of water in question made the option a low priority.

LCRA estimated the amount of water supply that could be developed if the 34 currently permitted wastewater treatment plants around Lake Travis, which total 7 million gallons per day, discharged at their fully permitted flow amounts. If all were to begin discharging tomorrow this would mean an additional 8,000 acre feet of water or about five inches of water in Lake Travis annually. To put this in perspective, Lake Travis holds 1.1 million acre feet of water when full. Clearly, water supply development is not an appropriate reason to change the rules. In fact, additional surface water from the lakes would be needed to irrigate the more than 20 golf courses around the lakes if effluent became unavailable.

### **Summary**

LCRA appreciates the opportunity to comment and raise awareness of the tools LCRA has and is offering for use in evaluation of any potential change to Chapter 311 as it relates to the Highland Lakes.