



Murfee Engineering Company

October 5th, 2016

VIA E-MAIL

Bryan W. Shaw, Ph.D., P.E., Chairman
Texas Commission on Environmental Quality, MC 100
P.O. Box 13087
Austin, TX 78711-3087

Dear Chairman Shaw,

I am writing to urge your favorable consideration of the City of Austin rule-making petition proposing to modify chapters 222 and 309 of Title 30 of the Texas Administrative Code relating to wastewater effluent disposal via land application.

Rapid population growth especially in central Texas not only puts increasing pressure on wastewater treatment facilities to expand capacity, but also increases demand on already limited potable water supplies. As described in the 2012 State Water Plan, Texas faces an immediate need for 3.6 million ac-ft/year of additional water in the event of a severe drought, and is projected to need an additional 8.3 million ac-ft/yr of additional water supplies by 2060. Annual economic losses from not meeting water supply needs could be as much as \$115.7 billion by 2060 with the potential loss of more than 1 million jobs.

Expanding or creating new wastewater effluent land application facilities is becoming increasingly difficult as the cost of land continues to dramatically rise in the face of our expanding population. As estimated by the Texas A&M University Institute of Renewable Natural Resources, the market value of Hill County land was estimated to be on average \$2,127/acre in 1997, but by 2012 has risen to \$6,830/acre.

Many existing wastewater land application facilities already utilize a beneficial reuse authorization under 30 TAC 210 from TCEQ to use treated wastewater effluent and offset demands on our limited potable water supplies. In some cases, wastewater permit holders who are maximizing water conservation efforts through 30 TAC 210 reuse authorizations may not fully utilize the dedicated disposal fields required by their wastewater land application permits. Because dedicated land disposal fields may be only partially utilized by wastewater permittees who also utilize beneficial reuse authorizations, current TCEQ regulations act in part as an impediment to expansion of land application facilities and do not fully encourage maximum reuse of wastewater effluent for beneficial purposes.

The City of Austin in collaboration with multiple governmental entities, environmental advocates and wastewater permit holders has developed draft rules that propose a new, entirely optional means to more sustainably manage wastewater and conserve water supplies. The City of Austin petition proposes to provide partial credit for beneficial reuse of effluent against the required size of dedicated land disposal fields and effluent storage volumes. Because the proposed credit would only be for the volume of effluent that can be demonstrated through engineering analysis, even in wet conditions, to never need to go to the dedicated disposal fields, their proposal not only encourages better water

conservation but also is protective of water quality. Thus, permittees can allocate limited capital dollars towards water reuse infrastructure instead of redundant and increasingly expensive disposal fields that in some cases would not otherwise be irrigated with potable water.

Current TCEQ regulations require 100% redundancy for wastewater land application permit holders that also utilize a beneficial reuse authorization. Thus, current regulations do not reflect current industry practices, add unnecessary burden on permit holders seeking to maximize beneficial reuse, and result in unnecessarily higher costs for wastewater land application without increasing the level of protection of public health or the environment. The City of Austin proposal is a minimal modification of existing rules, combines two existing TCEQ wastewater regulatory programs, and if adopted would provide a clear pathway to permitting for applicants wishing to maximize reuse of wastewater effluent.

The State Water Plan clearly recognizes the need to find alternative water supplies or reduce demand on potable water to accommodate our increasing population. Reuse of water is an important water supply strategy included in plan, which identifies approximately 2.5 million ac-ft/year of additional water supply augmentation or potable demand reduction strategies involving water reuse programs by 2060.

The City of Austin proposal if adopted by TCEQ will help Texas meet the goals of our State Water Plan in a cost-effective manner that does not require the expenditure of additional public dollars. Because this proposal is consistent with the TCEQ philosophy to ensure that regulations are effective and current, and provides better flexibility in achieving environmental goals without compromising public health or water quality, I urge your favorable consideration.

Sincerely,



Dennis Lozano, P.E.
Engineering Manager