

The Greater Edwards Aquifer Alliance is a nonprofit organization dedicated to the protection and preservation of the Edwards and Trinity aquifers, their springs, watersheds, and the Texas Hill Country that sustains them. Our alliance has 59 member groups across 21 counties in the Texas Hill Country region. We work in this field to ensure the protection of the health, safety, and welfare of all those who rely on these sources of water. As such, we appreciate the opportunity to submit the following comments and questions on this rulemaking.

SB 1145 (89r) directed the TCEQ to adopt TLAP standards *specifically* for produced water. The legislation made no mention of general industrial wastewater streams. The Chapter 309 section of the proposed rule, however, refers repeatedly to establishing standards for land application of “*industrial waste water, including produced water.*” **Why has the rulemaking been extended beyond the scope of the legislation it is intended to implement?**

The proposed new waste streams are extremely different than the domestic sewage waste streams currently included in the rules. All limits and specifications are related to nutrient concentrations and nutrient handling and recycling in the soil and land. Produced water and industrial waste are likely to have little nutrient content relative to the metals and other contaminant constituents present. Current established design guidance, application limits, etc. are entirely insufficient for the new sources of waste. **Why do the limits and specifications proposed remain relevant only to domestic sewage waste streams and do not take into account the different constituents present in the industrial and produced streams?**

Produced and industrial water waste streams will have specific pretreatment requirements, yet there is no mention of these requirements in the context of this rulemaking. TLAP application of produced water should not be considered without specific pretreatment requirements, verification of the incoming waste stream contents, and significant revisions of the acceptance criteria for water quality of the applied waste onto the land surface. **Why are these specific requirements and revisions not included in this proposed rule?**

Produced water is not equivalent to existing domestic waste streams and it is a significant error to handle them as if they were. There is no effective remediation of produced water and industrial waste components by applying them to the soil – the existing criteria for safe disposal are inadequate and highly unlikely to be protective of surface or groundwater supplies. **Why does the proposed rulemaking rely on soil application for the remediation of produced and industrial waste components?**

Furthermore, TCEQ is not currently able to adequately monitor *existing* TLAP sites much less new and non-domestic sewage TLAP sites. There is virtually no oversight and most sites are self-regulated by operators. The rulemaking indicates no cost burden to the transition to TCEQ from the RRC or for the rulemaking. **How can TCEQ accommodate the extra burden of this rulemaking without additional funds or personnel?**

As noted in the language of SB 1145, there is supposed to be a separate establishment of limits associated with the produced water reclamation and discharge. Instead, there is some reference to a single pilot study and no mention of establishing specific limits for the pretreatment of these waste streams in the rulemaking. **Why was this step omitted?**

At a high level, we agree that if the state is going to authorize the use of produced water for irrigation of lands and crops, the TCEQ should regulate its use and should adopt water treatment standards. **What we do not agree with, however, is the weak treatment standards actually laid out in this proposed rulemaking.** Produced water should not be treated the same as municipal wastewater. We need much stricter standards for treatment and more robust testing protocols to ensure our food and water is kept safe from the constituents found in produced water. There are no long-term, real-world studies that prove treated produced water can be used to irrigate crops or land safely.

The draft rule proposes 250- to 500-foot setbacks from public and private water supply wells for application of produced water. Texas counties, in contrast, require domestic waste water treatment plants to be spaced anywhere from ¼ acre to 5 or 10 acres away from water supply wells. Setbacks for application of produced water should be consistent with county requirements for separating the use of produced water from wastewater discharges. **At a minimum, TCEQ should require setbacks of one acre from water supply wells for land application of produced water.**

At a more granular level, we have significant concerns about the potential for land application of produced water over the Edwards Aquifer Recharge and Contributing zones. The Edwards Aquifer is an incredibly sensitive and prolific karst limestone aquifer, highly susceptible to pollution and contamination. **Regardless of the standards established, and we do hope stricter standards are established, we request that TCEQ prohibit the land application of produced water over the Edwards Aquifer Recharge and Contributing zones.**

We also request the TCEQ extend the public comment period. TCEQ has not provided the appropriate public notice or comment period to ensure that concerns are adequately addressed.