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September 12, 2013

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RRC OF TEXAS  
SEP 16 2013  
O & G  
AUSTIN, TX

Rules Coordinator  
Railroad Commission of Texas  
Office of General Counsel  
P.O. Drawer 12967  
Austin, Texas 78711-2967

Re: Comments on proposal to amend 16 T.A.C. § 3.9 and 3.46

To The Honorable Railroad Commission of Texas and Staff:

The Lone Star Groundwater Conservation District ("District") welcomes this opportunity to provide informal comments on the proposed changes to Rules 3.9 and Rule 3.46 (regarding "Disposal Wells" and "Fluid Injection into Productive Reservoirs"). The substantial increase in oil and gas wastewater disposal in Texas has raised concern over impacts to the groundwater quality throughout the aquifers in Texas. Although the Commission has proposed a number of positive amendments taking the permitting process for disposal wells in a direction towards better groundwater protection, the District submits its comments, below, in an effort to seek the balance of necessary groundwater protections without placing unreasonable burdens on applicants.

The District is pleased to see the proposed rule change that requires an applicant for a disposal well to provide notice of the application to the local groundwater district if the proposed disposal well is within its jurisdiction. Engaging groundwater districts in the permitting process will help ensure protection of our precious resource. To this end, the District hopes the Commission will adopt changes to Rules 3.9 and 3.46 that facilitate coordination between the Commission and groundwater districts while the Commission assesses whether to issue a permit for a wastewater disposal well. Groundwater districts have vast information of groundwater data and water well locations that could assist the Commission as it strives to make sound decisions on whether groundwater quality is jeopardized.

Additionally, the District would like to emphasize the increasing demand for brackish groundwater across Texas. Rules 3.9 and 3.46, as proposed, afford less protection for USDWs than for Usable Quality Water. The Commission has defined USDWs as non-exempted aquifers with 10,000 total dissolved solids or less, and

Usable Quality Water as 3,000 total dissolved solids or less. The District believes protecting USDWs from oil and gas waste disposal is vital to Texas' future water supply. Moreover, protection of USDWs is consistent with other regulatory requirements for groundwater quality protection that stem from the Safe Drinking Water Act.

The District's comments attempt to achieve the goals identified above. For your consideration, the District submits the following:

- 1) The latest proposed rule amendments issued by the Commission deleted from 16 T.A.C. § 3.9(a)(1)(B)(ii) the intent to isolate and seal off USDWs to prevent contamination from migration of injected fluids or displaced formation fluids. The new version of the proposed rule affords less protection to USDWs. The District recommends adopting the first version of Rule 16 T.A.C. § 3.9(a)(1)(B)(ii) published by the Commission. Moreover, the District recommends 16 T.A.C. § 3.9(c)(1) be amended to require 250 feet of impervious strata between the injection interval and any USDW.
- 2) The District proposes 16 T.A.C. § 3.9(c)(2) should include language that requires either the Groundwater Advisory Unit of an applicant to consult any groundwater district with jurisdiction over the location of the proposed well. The language should require a request of information related to water quality and water well location within the area – at least a 1 mile radius.

Additionally, the District would appreciate insight as the current methodology used by the Groundwater Advisory Unit for determining whether Usable Quality Water or USDWs will be endangered from waste disposal.

- 3) The District proposes 16 T.A.C. § 3.9(d)(3)(D) require a finding by the Groundwater Advisory Unit as to the depth to which USDWs must be protected, not just Usable Quality Water. Moreover, the Groundwater Protection Determination should be made within 1 year of the application being filed. A change in aquifer conditions, or new information can come to light, that can influence the decision of the Commission. Relying on a determination that was concluded 5 years prior to submission of the application for a disposal well can lead to oversight of endangerment to USDWs.
- 4) The District recommends that 16 T.A.C. § 3.9(d)(3)(E) be amended to require that the map include all wells of public record within a 1-mile radius of the proposed disposal. The current proposal of ¼ mile does not account for the ability of displaced formation fluids or contaminants to migrate laterally further than one-half mile. Moreover, it is important to fully understand the extent of nearby wells that may be directly impacted, or that may serve as pathways for migration of contaminants into USDWs.
- 5) The District recommends that 16 T.A.C. § 3.9(d)(3)(E) be amended to require that the table of wells of public record include all wells within a one mile radius of the proposed disposal well as opposed to the currently proposed ¼ mile. The currently proposed rule does not account for the ability of displaced formation fluids or contaminants to migrate laterally further than one-half mile.

- 6) As indicated above, the District is pleased to see and strongly supports the change to 16 T.A.C. § 3.9(e)(2)(F), requiring the applicant to give notice of the application to the groundwater conservation district, if the well is to be located in an area covered by a groundwater conservation district that has an established mailing address.
- 7) However, to provide adequate time for groundwater districts (and all affected persons) to evaluate an application for a disposal well, the District recommends that 16 T.A.C. § 3.9(e)(5) be amended to allow for 30 days prior to the Commission approving any application.
- 8) Similarly, in order to allow sufficient time for affected persons to evaluate an application for a disposal well, the District recommends that 16 T.A.C. § 3.9(e)(6) be amended to provide thirty days before administratively approving the application.
- 9) The District recommends that 16 T.A.C. § 3.9(g)(1) be amended to require a finding that all wells within one mile of the proposed disposal well location are cased and cemented or plugged in a manner that will protect USDWs. It is critical to the future water supply of Texas that the Commission establishes the legal framework necessary for protecting USDWs.
- 10) The District strongly supports the addition of 16 T.A.C. § 3.9(h)(2), prohibiting the Commission from approving an application for a disposal well permit under this section for any well in which the surface casing is not set and cemented from the ground surface to the base of usable-quality water as determined by the Groundwater Advisory Unit.
- 11) The District recommends that 16 T.A.C. § 3.9(h)(3) be amended to require production casing to be cemented across the injection interval and extending up to the base of the surface casing. Only requiring 600' of cement above the base of the deepest USDW exposes USDWs located below the surface casing to introduction of displaced formation fluids or contaminants. On the other hand, requiring cementing the entire production casing to the bottom of the surface casing better protects USDWs from displaced formation fluids and contaminants.
- 12) To the extent practicable, the District recommends that all changes made pursuant to the comments submitted herein with regard to Rule 3.9 be similarly applied to Rule 3.46 (regarding "Fluid Injection into Productive Reservoirs").

Thank you again for the opportunity to provide these comments and participate in this important process. We appreciate the good work that the Commission Staff has done drafting the proposed amendments as we move toward our mutual goal of maintaining a sustainable water supply throughout Texas.

Sincerely,

A handwritten signature in cursive script, appearing to read "Kathy Turner Jones".

**Kathy Turner Jones**

**General Manager**