Bryan W. Shaw, Ph.D., *Chairman*
Carlos Rubinstein, *Commissioner*
Toby Baker, *Commissioner*
Zak Covar, *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 24, 2012

Mr. William K. Honker, P.E.
Acting Director
Water Quality Protection Division
U.S. Environmental Protection Agency, Region 6
1445 Ross Ave, Ste 1200
Dallas, TX 75202-2733

Re: Request for Approval of Non-Substantial Underground Control Program Revision to Establish an Aquifer Exemption in the Goliad Formation, Goliad County

Dear Mr. Honker:

I am writing in response to your letter of May 16, 2012 requesting two separate groundwater modeling demonstrations to support TCEQ's non-substantial Underground Injection Control (UIC) program revision to identify an exempted aquifer in Goliad County, Texas. I appreciate your effort to explain the rationale for requesting the modeling and for providing some of the specific details that you want to see modeled. However, as we have stated previously, EPA regulations, EPA guidance, and EPA precedent do not require groundwater modeling to consider a non-substantial UIC program revision to identify an exempted aquifer. I ask that you take final action on TCEQ's non-substantial program revision without consideration of the modeling that you request.

TCEQ asks you to approve the non-substantial program revision under the provisions of 40 CFR §§ 144.7, 145.32, and 146.4. EPA's request for modeling and information about water wells outside of the designated aquifer exemption area confuses the aquifer exemption requirements with the UIC permit and rule requirements applicable to *in situ* uranium mining. In describing the aquifer exemption requirements, EPA has previously stated that the fact that persons may use drinking water drawn from the aquifer outside of the proposed exemption boundary is irrelevant to Section 146.4(a), which looks only to the use of the exempted portion of the aquifer.[1] TCEQ agrees. Although the groundwater outside of the designated exempted aquifer is not relevant to the aquifer exemption criteria, such groundwater is protected by compliance with TCEQ injection well permits, production area authorizations, and enforcement of TCEQ's rules. EPA has also stated that it is the permit process, not the exemption, which is intended to control the mining through operational conditions and the requirements for monitoring, reporting, corrective action, and restoration.[2] TCEQ agrees. EPA has similarly stated that even after an aquifer is exempted, strict controls upon construction and operation of the wells are imposed by

[1] The TCEQ agrees with the statements on p. 44 by EPA's Brief of Respondent submitted to the United States Court of Appeals for the Eight Circuit in successful defense of a challenge of EPA's approval of a non-substantial program revision designating an exempted aquifer related to *in situ* uranium mining in Nebraska. See *Western Nebraska Resources v. EPA*, 943 F.2d 867. Citations to follow are from EPA's Brief of Respondent.

[2] Brief of Respondent, p. 42.

regulation and permits, and no movement of fluids into or between underground sources of drinking water (USDWs) may take place.[3] TCEQ agrees. EPA has stressed that the safety of uranium mining is due to the permittee's duty to satisfy the extensive operational, monitoring, restoration and corrective action requirements of the state UIC permit and the required radioactive materials license.[4] TCEQ agrees.

TCEQ, and its predecessor agencies, have had over 30 years of successful regulation of *in situ* uranium mining operations in Texas. TCEQ's permits and rules protect USDWs. To ensure protection of groundwater in areas outside of the mining area, the permittee: 1) must identify any existing wells that could serve as a conduit for mining solutions to move outside the production zone or the production area (30 TAC §331.42); 2) must construct Class III wells in accordance with proper construction requirements (30 TAC §331.82); 3) must maintain the mechanical integrity of all Class III wells (30 TAC §331.4); 4) must implement corrective action standards as necessary to prevent or correct pollution of a USDW (30 TAC §331.44); 5) is subject to Executive Director approval of construction and completion of wells (30 TAC §331.45); 6) must operate wells in accordance with proper operation requirements (30 TAC §331.83); 7) must monitor wells in accordance with monitoring requirements (30 TAC §331.84); 8) must submit reports in accordance with reporting requirements (30 TAC §331.85); and 9) must close wells in accordance with a plugging and abandonment plan in a manner that will not allow the movement of fluids through the well out of the injection zone or to the land surface (30 TAC §§ 331.46 and 331.86). TCEQ rules also require that mining occur within designated production areas.

The Production Area Authorization issued under the terms of the Class III injection well permit further requires: 1) the confinement of mining solutions to the production zone within the area of designated production zone monitor wells (30 TAC §331.102); 2) the establishment, location and spacing for production zone monitor wells (monitor well ring) and non-production zone monitor wells (monitor wells for underlying or overlying zones) (30 TAC §331.103); 3) the establishment of baseline groundwater quality for restoration goals and control parameters for excursion detection (30 TAC §331.104); 4) the establishment of monitoring standards for detecting mining solutions in monitor wells (30 TAC §331.105); 5) remedial action for any detected excursions (30 TAC §331.106); and 6) groundwater restoration after the completion of mining (30 TAC §331.107). The TCEQ's rules and requirements for *in situ* uranium mining are more specific and more protective of groundwater and USDWs than EPA's regulations in 40 CFR Parts 144 and 146.

I am troubled by the statement in your letter that based on EPA's experience with other *in situ* mining projects, EPA believes there is a high likelihood that, following mining activities, residual waste from mining activities will not remain in the exempted aquifer. EPA has not shared this experience with TCEQ on any of the *in situ* uranium mining projects in Texas. There have been 43 Class III injection well permits issued for uranium mining in Texas. After completion of mining, restoration and reclamation activities, concurrence from the United States Nuclear Regulatory Commission is required to approve the final decommissioning, including groundwater restoration, of an *in situ* uranium mine. There has not been one instance of documented off-site pollution of a USDW from *in situ* uranium mining activities. TCEQ's permits are subjected to extensive public notice and participation requirements, and TCEQ

---

[3] Brief of Respondent, p. 8.

[4] Brief of Respondent, p. 12.

apprises EPA of pending permit actions. EPA has never commented to TCEQ that a pending permitting action for an *in situ* uranium mining project would lead to the contamination of a USDW outside of an exempted aquifer. EPA has never informed TCEQ that the authorized UIC program is out of compliance with the Safe Drinking Water Act because Class III injection well operators are failing to protect USDWs or groundwater outside of exempted aquifers. Nor, has EPA notified TCEQ that EPA was intending to take an enforcement action against a Class III injection well operator for failing to protect USDWs as required by TCEQ permit or rule. It appears that EPA may be swayed by the unsubstantiated allegations and fears of uranium mining opponents who have contacted you regarding TCEQ's program revision. The TCEQ has not been invited to those discussions nor provided any opportunity to refute any allegations about TCEQ's UIC program.

Again, I ask for your prompt approval of this non-substantial program revision. The Safe Drinking Water Act requires EPA's approval or disapproval of a state's entire UIC program within ninety days of the state's application. Yet, EPA has taken over a year to consider the non-substantial revision of TCEQ's already-approved program relating to the aquifer exemption in Goliad County. The delay and shift in position on the consideration of the program revision create uncertainty for the TCEQ program as well as the regulated community. If you decide to disapprove this non-substantial program revision, I would respectfully request that you provide a statement of the reasons for your determination, the citation to the statute or regulation that compels such a determination, and the source of any factual information used to support such a determination.

The TCEQ remains committed to the approved UIC program and believes our permits and authorizations protect USDWs in the area as required in the Safe Drinking Water Act. We will continue to consider all of our options and remain hopeful that under EPA's new leadership at Region 6, we can reach a satisfactory resolution for everyone involved.

Sincerely,

Zak Covar
Executive Director