



**DAVID VOORHIS  
& ASSOCIATES**

*Data Research, Regulatory & Petroleum Engineering  
Consulting for the Oil & Gas Industry*

281-A Mooring Circle  
Austin, Texas 78734-4152  
(512) 261 - 3476

March 4, 1998

Governor George Bush  
P. O. Box 12428  
Austin, Texas 78711

Re: Endangerment of Texas Ground Water  
through the Texas Railroad Commission  
program for EPA Class II injection wells

Dear Governor Bush:

This letter and the enclosed documents are being sent to you to let you know about problems existing with the Texas Railroad Commission's program for EPA Class II injection wells. Another reason for sending you this letter is to get your help in correcting the problems with the Commission's injection well program. I have been told that these problems are political issues, regardless of whether or not engineering science indicates Texas ground waters are endangered.

The problems with the program involve the endangerment of Texas ground water where: improperly plugged wells around injection projects are not identified; incorrect scientific principles are being used to justify injection projects; and, the practice of engineering by non-engineers and/or non-qualified applicants occurs. Greater details concerning these issues are described in the enclosed letter to William B. Hathaway of the Environmental Protection Agency.

I believe budget constraints and budget cuts at the Texas Railroad Commission (TRRC) have created a shortage of qualified petroleum/reservoir engineers (or reservoir engineering expertise) on staff that could have ensured that these types of problems do not occur. The TRRC seems to have plenty of geologists and lawyers willing to make petroleum/reservoir engineering type decisions without the scientific background to distinguish between correct and incorrect use of scientific principles. It is my opinion that the TRRC believes the restrictions of the Texas Engineering Practices Act do not apply to their operations and the entities that submit engineering calculations to the TRRC. Their past actions support these opinions.

Please read the letter I sent to William B. Hathaway of the EPA. The Hathaway letter discusses some of the TRRC injection well program problems. It also reveals a study area in North-Central Texas where the drinking water is in danger of contamination from oil field brine.

I welcome any of your comments and questions concerning these problems and issues. This has been a non-funded effort, so any additional non-funded time I spend on these issues will be limited. I can be reached by telephone at (512) 261-3476 or at the address listed in the letterhead.

Sincerely,

**ORIGINAL SIGNED by David Voorhis**

David B. Voorhis, Ph.D., P.E.  
Owner