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April 21, 1998

Mr. Steve McCleery - ADA
Travis County District Attorney's Office
Attn: Public Integrity Unit
P. O. Box 1748
Austin, Texas 78701

Re: Additional Documents concerning TRRC
injection well program problems/Investigation Request
Document Package #3

Dear Mr. McCleery:

Enclosed with this letter are three items related to the injection well programs problems of my April 2, 1998 letter and its associated package of documents. The three items of this letter and their description are below.

- 1) **April 21, 1998 letter to Ed Jones of the Texas Engineering Board:** This letter updates the Engineering Board on some of my efforts concerning the Texas Railroad Commission (TRRC) EPA Class II injection well program. It is my impression that the Engineering Board is going slow on investigating these matters. Mr. Jones tells me these are very sensitive state issues. I also have the impression that the Engineering Board does not think that I informed enough state officials concerning these problems. I think I have been diligent in notifying officials of these politically incorrect issues. A discussion concerning my efforts to inform state and federal authorities is enclosed with this letter as item 4).
- 2) **Copy of the Certified Mail Receipts (2) for the "Dunning" letter:** The dunning letter from of the April 2, 1998 package was received by on September 20, 1995. It was sent as certified mail, Receipt No. Z 372 471 839. The dunning letter contains a discussion of some of the improperly plugged well problems in his 1/4 mile Area of Review (AOR). Prior to the dunning letter, was informed of the improperly plugged well problems in telephone conversations prior to and up to his verbal termination of my services sometime after 6/27/95. The transmittal letter to the TRRC identifying only one improperly plugged well was dated October 17, 1995. These improperly plugged well issues relate to fulfilling the requirements of Statewide Rule 46 and the applicant's possible violation of *Texas Natural Resources Code*, Sec. 91.143. I am **not** interested in hurting or, but I would like to know why they did not identify all improperly plugged wells on the Well No. 6 injection application when I am legally obligated to perform this duty.
- 3) **Copy of three pages from Defendant's Reply of my Initial Discovery requests:** This three page item contains the 1st, 5th and 9th pages of an original discovery document. The items underlined in red indicate the argument that I should have completed the injection application. I never contracted to complete the injection application. I only contracted to **assist** in his efforts to file an injection application according to the services listed in my brochure. I could not complete the application because of several improperly plugged well issues that made completion of the application **illegal**. Some of these issues are as follows.
 - a) In order for me to legally proceed with the injection application I would have had to identify all 6 (5 inside the AOR) known and suspected improperly plugged wells known at that point in time. Pressure front calculations would be needed to show no adverse reservoir pressures would develop. From my graduate education and work engineering experience I knew that

scientifically correct pressure front calculations (PSS equation) would show that the improperly plugged wells pose a danger to fresh water sands. If injection was to proceed without taking care of the improperly plugged well problems, restrictions would be needed on the permitted injection rates and pressures to prevent injection operations from creating a danger to fresh water sands. It is my guess that the restrictions would probably be so severe that the operator would not use the injector. These issues were engineering related and had not agreed to pay for engineering services.

- b) My conversations with led me to believe that wanted me to proceed with filing the injection application without identifying all improperly plugged wells. I was not given permission to discuss the improperly plugged well problems with offset operators or the TRRC. His comments to “hurry up” with the application made me believe this was the case. At that point in time, the 1/4 Mile Area of Review map was still incomplete, with too many questionable and unknown problems.
- c) Proceeding with the injection application without identifying the improperly plugged wells would have been in violation of Texas Natural Resource Code, Section 91.143; Statewide Rule 46; and, the Texas Engineering Practice Act.
- d) At the time, both and I knew it was illegal to have fluid migration to fresh water sands. Both and I had copies of the TRRC publication, *Underground Injection Control Reference Manual* (June 1995). In the Area of Review discussion on page 7 of this manual, a properly plugged well “prevents the movement of fluids into strata other than the authorized injection or disposal zone.” In Statewide Rule 9 and 46, a properly plugged well “will prevent the movement of fluids from the authorized injection into fresh water strata.”
- d) I told I could not complete his injection application with the current information known at that point in time (late June 1995), because it would be a violation of my engineering license. called me and terminated my services sometime in the first week of July 1995. I had already ceased work on the project on June 28, 1995.

Subsequent work on the 1/4 mile AOR map revealed there may be as many as 16 known or suspected improperly plugged wells in and near the 1/4 mile circle. Subsequent research work on the engineering report revealed the TRRC was applying the infinite acting pressure transient equation for all reservoir types and injection times (universal use). This is a scientifically incorrect use of the infinite acting pressure transient equation, as discussed in the engineering complaint (pages 2 through 5) and the letter to Hathaway (pages 2 through 9).

It is my opinion that the Defendant’s answers in item 3) of the discovery documents fail to recognize that completion of the injection application, without accounting for the improperly plugged wells, would have been illegal. His subsequent filing of this application reveals he only considered one of the suspected or known improperly plugged wells known to exist at the time my services terminated. Attorneys that I have approached to take the collections case on a contingency basis say that they cannot bring up the illegal issues concerning improperly plugged wells. The illegal issues concerning improperly plugged wells is where my contractual relationship with went “south”. It should be pointed out that these illegal issues are not “crystal clear” issues because of the TRRC past approval of injection applications having wells plugged with mud inside the 1/4 mile Area of Review.

- 4) **Discussion of Levels of Authority informed of the problems with the TRRC’s EPA Class II injection program:** This document lists TEN levels of authority that have knowledge of problems with the TRRC’s Class II injection program. The degree of knowledge concerning the injection program problems may not be the same at all levels.

Please keep these documents confidential (especially the “dunning” letter, the map editing booklet, certified mail receipt and the discovery documents). Return them if they are of no use. If they are of no use, call me and I will come by to retrieve the documents. I am still trying to recover payment for services related to the “dunning” letter. I do not want further problems by having these documents reach the hands of people intent on harming me or my business.

I have been told, by individuals familiar with TRRC politics, that unless the voting public in the Dallas and Houston area are aware and/or concerned with these issues, there may not be enough political support to force the TRRC to correct or find legal solutions to the injection program problems. If it had been legal to have improperly plugged wells in a 1/4 mile AOR and it did not conflict with my engineering license, I would have completed the injection application and never addressed these issues.

I would greatly appreciate your office giving me recommendations of other authorities that can settled the issues of this letter and the April 2, 1998 letter if the Public Integrity Unit of the Travis County District Attorney’s Office does not see a need to pursue these matters.

Please contact me by telephone at (512) 261-3476 if you have any questions concerning this letter and the enclosed documents. I would greatly appreciate any free advice you can offer concerning these issues.

Yours truly,

ORIGINAL SIGNED by David Voorhis

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