Dorsey

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

JUL 2 1 2004

Mr. John Santos
UIC Permits Team
Industrial and Hazardous Waste Permits Section MC-130
Texas Natural Resource Conservation Commission (TNRCC)
P. O. Box 13087
Austin, Texas 78711-3087

Dear Mr. Santos:

This letter outlines Region 6's current findings and concerns in its review of the TNRCC's application to exempt the Goliad B and C formations for purposes of uranium mining operations at the Alta Mesa mine site in Brooks County, Texas. The selection criteria for exemption of any aquifer are found at Title 40 of the Code of Federal Regulations (40 CFR) Section 146.4. Paragraph (a) of that section requires that the aquifer does not currently serve as a source of drinking water. These criteria can allow for aquifers serving as water sources for purposes other than human consumption to qualify for exemption. Conversely, aquifers serving as water sources for humans are not exemptible.

Information collected during our on-site visit in March confirmed that several water source wells are contained within 1/4 mile of the proposed exemption boundary. In addition, pump tests provided in the application are inconclusive in regards to hydraulic communication between formations. Lacking definitive information as to the completion depths of some of these source water wells, EPA utilized sampling analyses provided in the application to develop the enclosed Piper Diagram. This diagram implies close similarities in the water composition between adjacent formations and does not dispel the possibility of hydraulic connection between the probable source water formations (Goliad A and possibly part of the lower Lissie) and those proposed for exemption.

One well, the Camp Well, is a water source well for human consumption that may be in hydraulic communication with the proposed exempted zones. To meet the condition at 40 CFR 146.4 (a), EPA requires that additional pump tests be conducted that conclusively show the Camp Well is hydraulically isolated from the proposed exempted zones, or a permanent alternative source of water be made available to the Camp complex.

The other water source wells located within the 1/4 mile boundary appear to be for livestock and industrial purposes only. For these wells EPA requires either pump tests be conducted that conclusively show hydraulic isolation from mining zones, or actions that ensure these wells will not serve as a source of water for human consumption.

Should pump tests be conducted, test designs should entail consideration of the hydrogeologic properties of the respective sands, the optimum rate, duration and significant change in head at the observer wells. We request that any pump test plans be submitted to EPA for review prior to operations. Should you have any technical questions regarding the Piper Diagram or pump test recommendations, please contact Ms. Nancy Dorsey at (214)665-2294. Should you wish to discuss other potential actions, please contact me or Phil Dellinger at (214)665-7165. I would also like to take this opportunity to express our appreciation for your efforts and those of Mr. Richard Heitzenrater during our inspection of the Alta Mesa site in March.

Sincerely yours,

Larry Wright

Larry D. Wright
Chief
Source Water Protection Branch

Enclosure

cc: Mr. Wade Wheatley, TNRCC
Mr. Bill Shafford, TNRCC