Memorandum

To : Gene Boyer

Date :

June 16, 1988

Subject:

Review of Ekotek-Lube Revised Workplan

From : Bill Owen

Here are my comments on Jaykim Engineers' revised workplan for Ekotek-Lube:

A. Proposed Residual Investigation

 A proposal to test the integrity of the tanks should be included in this section.

B. Proposed Subsurface Investigation

1. (Paragraph 4): Possible hole locations should not be ruled out; due to "hardscape and unknown location of underground pipes", without first attempting to locate these "pipes" using geophysics (e.g. metal detector, EM-31, pipe locator, etc.).

C. Soil Sampling

- Compositing the surface and 1 1/2-foot samples is O.K.; however, the 3-foot and 6-foot samples should not be composited.
- If split samples will be retained for future analysis, careful attention should be paid to sample holding times.
- 3. How will the borings be logged? From cuttings only? The ideal method would be to continuously core the holes. Another alternative, though less desirable, would be to collect cores at 2 1/2-foot intervals, logging cuttings in-between.

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D. <u>Water Sampling</u>

- These first wells should sample only the uppermost aquifer. Deeper aquifers can be sampled later as needed to determine the extent (if any) of groundwater contamination.
- 2. The use of 25-fcot screens is unacceptable. Long-screen wells act to dilute samples, and in this case may act as a pathway for shallow contaminants to enter a lower aquifer. Maximum acceptable screen lengths are warrented only for low-producing zones (e.g. clay, silt), and should be no longer thab 10-feet.
- The grade of sand to be used as a filter pack should be specifically based on the lithology of the screened interval.
- 4. A bentonite seal (minimum thickness = 3 feet) should be placed between the filter pack and grout seal.
- How will the wells be developed? Development should be by surging and pumping, or bailing.
- 6. The minimum volume of water to be purged prior to sampling should be specified (around 3-5 well volumes). The following water parameters should be observed during purging to ensure stabilization prior to sampling: pH, temperature, conductivity.
- Both wells and borings should be surveyed for location and elevation.

E. Analysis

- The water samples should be analyzed immediately in the field for pH, temperature, and conductivity.
- EPA method 6010 should be included in the summary of testing methods.

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