

2/22/93

MEMORANDUM

TO: Fred Fisher

FROM: Tom Holcomb  
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SUBJECT: Disposal of Investigation-Derived Waste  
Holloman AB Lagoons and Lakes Investigation

Blue 93 HAFB

The Holloman AB Lagoons and Lakes Investigation will produce two types of investigation-derived waste: soils from monitoring well installation and groundwater from well development and purging prior to sampling. Prior investigations at the monitoring wells associated with the lagoon system indicate that groundwater in this area contains extremely low levels of organochlorine pesticides (the Method 8080 pesticides); Appendix IX sampling of these wells indicated no other contamination. The recent Geoprobe investigation, conducted in siting of additional monitoring wells, supported the previous findings of a very low level of pesticides (in the parts-per-trillion (ppt) to parts-per-billion (ppb) range). The recent results were reported in the Chemical Data Acquisition Plan for the Lagoons and Lakes Investigation.

Soils from the monitor well borings will be collected in drums and moved to a location on-Base. Soil samples will be collected for TCLP analysis from locations that may have been impacted by historical leakage from Pond D. Soil samples may be collected from other borings at the discretion of the Base Environmental Coordinator for additional TCLP analyses. Final disposal of soils will be determined based on the results of the TCLP and groundwater analyses.

*on-site borings (on-Base)*

The additional monitoring wells to be installed to monitor for leaks from the lagoons are intended to identify the lateral extent of groundwater contaminated with 8080 pesticides; thus, the groundwater in the area is not to be uncontaminated. At worst, we expect to recover groundwater containing levels of 8080 pesticides similar to those found during the Geoprobe investigation. Therefore groundwater from development and presampling/purging at the monitoring wells is expected to contain, at worst, levels of 8080 pesticides in the ppt to ppb range. This range is well below the level that could cause the groundwater to be considered hazardous waste.

We propose to dispose of development and purge water by spreading it over the soil surface adjacent to the well from which it is obtained. Care will be taken to spread the water over an area sufficiently large to avoid ponding, and far enough from the well to avoid recharge. This disposal method is justified based on the extremely low levels of contamination, if any, and the high water table in the area (approximately 4 feet below land surface).

We have discussed the possibility of disposing of the water by drumming it and pouring it into the lagoons at the headworks. We think this is less desirable for the following reasons.

- We are preparing to sample the water in the lagoons for 8080 pesticides. Although the water volume in the lagoons is large compared to the volume of development and purge water, it is possible that disposal of groundwater with very low levels of pesticides will confound the surface water sampling results;
- Waters from the lagoons ultimately flow into Lake Holloman and possibly Lake Shinky. Disposal of the groundwater in the lagoons could result in 8080 pesticides reaching these lakes, which are on public land and are accessible to the public; and,
- Because of the porous nature of the soils in the vicinity of the proposed monitoring well locations, the development and purge water is likely to percolate down to the water table very rapidly and is not expected to impact surface soil adversely.

Sampling of the groundwater at the well locations appears to be the best alternative, even to the possible impacts of pouring the water into the lagoons. We plan to begin sampling of these wells next week, so it is vital that we resolve these issues as soon as possible.