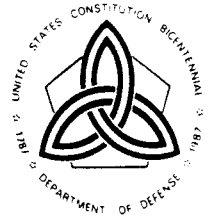




DEPARTMENT OF THE ARMY

HEADQUARTERS 7th INFANTRY DIVISION (LIGHT) AND FORT ORD
FORT ORD, CALIFORNIA 93941-5000

22 MAY 1990



REPLY TO
ATTENTION OF:

Plans Division

OU2-063

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Mr. Greg Antosz
Laboratory/Source Control Supervisor
Monterey Regional Water Pollution Control Agency
220 Country Club Gate Center, Suite 34,
Pacific Grove, CA 93950

Dear Mr. Antosz:

As you probably know, chemical analysis of groundwater from Fort Ord and Monterey County Water District (MCWD) supply wells revealed trace levels of volatile organic chemicals. The Fort Ord Landfills were suspected as a source of the groundwater contamination. This resulted in a Cleanup and Abatement Order from the California Regional Water Quality Control Board (RWQCB) in 1986.

To comply with this order Fort Ord and Harding Lawson Associates (HLA) conducted a Preliminary Hydrogeologic Investigation (PHI). The purpose of this investigation was to determine the potential impact of the Fort Ord Landfills on groundwater by assessing the presence of chemicals in the various aquifers, and provide a preliminary hydrogeologic characterization.

Currently, a Remedial Investigation/Feasibility Study (RI/FS) of the Fort Ord Landfills is being conducted by Fort Ord and Dames & Moore. As part of this project, twelve monitoring wells have been installed to further evaluate the groundwater quality and characterize the hydrogeology. Information from these wells will supplement information from the PHI.

Soil and fluid wastes were generated in the process of installing the wells. The fluid wastes consist of drilling fluids and groundwater removed during well development. These fluids are now being contained in seventeen Baker Tanks. Fort Ord will sample these fluids to determine how this waste should be disposed. Pending sample analysis results, we hope to dispose of this waste water to the Main Garrison Waste Water Sewage Treatment Plant.

You indicated in a conversation with Mr. Jonathan Bauer of my Environmental Branch that Monterey Regional Water Pollution Control Agency (MRWFCA) would like to have EPA Test Methods 601, 602, 624, 625 with PCBs, Priority Pollutant Metals and Cyanide, TPH and Oil & Grease analyses run to characterize the waste water. This characterization will determine if the waste water can be disposed of to the sewage treatment plant.

We feel that this extensive testing is not warranted. The groundwater from the various aquifers has been sufficiently characterized by the PHI performed by HLA to eliminate the need for many of these analyses.

Twenty-one monitoring wells were installed to conduct the PHI. Thirteen wells are installed in the uppermost unconfined aquifer. Four wells each are installed in the 180 foot aquifer, and the 400 foot aquifer. Soil samples were taken from various depths during well installation, and the groundwater was sampled quarterly for one year. In addition, groundwater samples were taken from the old and new Fort Ord supply wells and the MCWD supply wells.

Soil samples were analyzed by EPA Test Methods 8010 (organohalides), 8020 (aromatic hydrocarbons, methyl ethyl ketone and xylenes) and 7000 series (priority pollutant metals). Groundwater samples were analyzed by EPA Test Methods 601, 602, 624, 625, Total Petroleum Hydrocarbons (TPH) as outlined by the Leaking Underground Fuel Tanks guidance document (SWRCB, 1987), priority pollutant metals and general minerals.

The results of chemical analysis from soil and groundwater samples from the old and new Fort Ord supply wells, MCWD supply wells and the twenty-one monitoring wells, as stated in the HLA PHI, show:

1. Low levels of trichloroethene (TCE) in the soil at the water table near the landfill areas.
2. TCE, tetrachloroethene (PCE), total-1,2-dichloroethene (T-1,2-DCE), 1,1-dichloroethane (1,1-DCA) and benzene detected at or above drinking water action levels in the upper aquifer.
3. TCE and PCE detected below drinking water standards in the 180 foot aquifer.
4. Sporadic occurrence of volatile organic chemicals in the 400 foot aquifer.
5. Historically, carbon tetrachloride has been detected in supply wells.

No pesticides or polychlorinated biphenols have been detected. No cyanide has been detected, and the detected metals are considered to represent background levels.

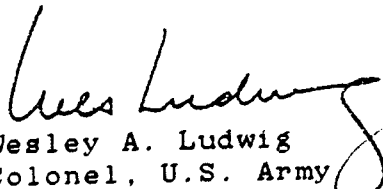
The analytes (TCE, PCE, T-1,2-DCE, 1,1-DCA and Benzene) present are best quantified by EPA Test Methods 601 and 602. EPA Test Methods 624 and 625 have not established the presence of additional analytes, and only marginally confirm the presence of analytes detected by EPA Test Methods 601 and 602. Priority Pollutant Metals are only sporadically detected and are considered to represent background levels. In addition, the water supply used during the drilling was tested by EPA Test

Methods 601, 602 and 8015 prior to drilling and no analytes were detected. This water constitutes nearly all the drilling fluids.

We believe that analyzing by Test Methods 601, 602 and TPH as outlined by the Leaking Underground Fuel Tank guidance document will adequately characterize the waste water to determine if disposal to the Main Garrison Waste Water Sewage Treatment Plant is feasible. As mentioned before, EPA Test Methods 601 and 602 are the accepted methods for quantifying TCE, PCE, T-1,2-DCE, 1,1-DCA and Benzene. TPH will detect any contamination resulting from incidental contact with drilling equipment and will confirm the presence of some analytes.

We hope to come to an agreement regarding this matter quickly, and are willing to work with you to resolve this issue. If you have any questions or comments please call Mr. Jonathan Bauer at (408) 242-2828.

Sincerely,


Wesley A. Ludwig
Colonel, U.S. Army
Director, Engineering and
Housing