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JUN 16 1997

Mr. Steve M. Alexander
Perimeter Areas Section Manager
Nuclear Waste Program
State of Washington
Department of Ecology
1315 W. Fourth Avenue
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Dear Mr. Alexander:

EXCEEDANCE OF CONCENTRATION LIMITS AT THE 316-5 PROCESS TRENCHES - A RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) FACILITY IN A FINAL STATUS/COMPLIANCE MONITORING PROGRAM

Analytical results from the first semi-annual groundwater sampling of the 300 Area Process Trenches (316-5) show that the concentrations of cis-1,2-dichloroethene (DCE) and uranium have exceeded their maximum concentration limits (MCLs). The 316-5 facility is a RCRA Treatment Storage and Disposal facility in final status and the approved groundwater monitoring plan requires that analytical results from samples collected in downgradient wells to be compared to MCLs.

Pursuant to WAC 173-303-645 subsection 10 (g)(i), when there is an exceedance, the owner/operator of the facility is required to notify the State of Washington Department of Ecology (Ecology) in writing within seven days (June 17, 1997). The notification is required to list what concentration limits have been exceeded and at which wells. Resampling to verify the results has not been conducted because current measurements are consistent with past trends.

The concentration of the groundwater constituent DCE exceeded the MCL (70 µg/L) in well 399-1-16B within the 316-5 monitoring network. That well is screened at the bottom of the unconfined aquifer. The results for DCE vary from 150 to 190 µg/L within the 4 independent monthly samples taken from December 1996 to March 1997. (Note: four monthly independent samples constitute one semi-annual sampling period.)

The concentration of uranium exceeded the proposed MCL (20 µg/L) at three 316-5 facility network wells. The wells include 399-1-10A, 399-1-16A, and 399-1-17 (all screened at the water table). The concentration of uranium ranged from 73.2 µg/L at well 39-1-10A to 157.0 µg/L at well 399-1-17A.

Mr. Steve M. Alexander

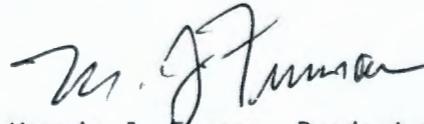
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Filtered iron and manganese also exceeded MCLs (secondary drinking water standards, 50 $\mu\text{g/L}$ for manganese and 300 $\mu\text{g/L}$ for iron). However, these exceedances are not due to groundwater contamination from the 316-5 facility, but are due to well effects in the lower portion of the aquifer where the oxygen content is very low. This effect is seen at other deeper wells throughout Hanford and also at upgradient wells at the 316-5 facility. Since the exceedances of manganese and iron are not due to discharges from the 316-5 facility they are not included in the notification to Ecology, but are mentioned here only as background information.

This letter satisfies the notification requirement for the 316-5 facility. All the specifics about each network well and groundwater constituents that exceed concentration limits in the 316-5 well network are available in Hanford Environmental Information System.

Sincerely,



Marvin J. Furman, Project Manager
Groundwater Project

GWP:MJF

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