STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

1315 W. 4th Avenue • Kennewick, Washington 99336-6018 • (509) 735-7581

July 26, 2001

Mr. Joel Hebdon, Director
Regulatory Compliance and Analysis Division
United States Department of Energy
P.O. Box 550, MSIN: A5-58
Richland, Washington 99352

Dear Mr. Hebdon:

Re: Transmittal of the Sampling and Analysis Instruction for the Removal of the 384 Underground Fuel Bunker

The Washington State Department of Ecology (Ecology) has reviewed the sampling and analysis instructions for the 384 Powerhouse Bunker Tanks. Ecology met with the United States Department of Energy (USDOE) and contractor representatives on July 17, 2001, to discuss Ecology's draft comments on the 384 Sampling and Analysis Instructions and the future direction for addressing releases from the site. Enclosed, please find Ecology's tabulated review comments.

Ecology is also providing the following informal advice in accordance with Washington Administrative Code (WAC) 173-340-510:

1. Excavate the site to fifteen (15) feet below grade for dermal exposure in accordance with the Model Toxics Control Act (MTCA), WAC 173-340-740(6b).

2. Sample and analyze the soil in accordance with the revised 384 Sampling and Analysis Instruction, incorporating changes as indicated in Ecology's Comment Review Table.

3. Evaluate the soil analysis results against the new MTCA standards, amended February 12, 2001, WAC 173-340-900 (Table 745-1).

4. Complete testing of the groundwater in accordance with WAC 173-340-450(3)(a)(iii). Consider incorporating groundwater testing into existing Comprehensive Environmental Response, Compensation, and Liability Act / Resource Conservation and Recovery Act (CERCLA/RCRA) monitoring plans.

If you have any questions regarding the Comment Review Table for the Sampling and Analysis Instructions, please contact Brenda Jentzen at (509) 736-5707.

The future clean up direction for the 384 Bunker Tank will depend on whether MTCA clean up standards have been met. Ecology will be pleased to discuss options with the USDOE.

Sincerely,

John B. Price

John Price, Environmental Restoration Project Manager
Nuclear Waste Program

JP:BJ:sb
Enclosure

cc: Mike Goldstein, EPA
Alex Teimouri, USDOE
Roger Bowman, FH
Mary Lou Blazek, OOE
Administrative Record: 300 Area & Underground Storage Tanks

384 Powerhouse Underground Storage Tank Sampling and Analysis Instructions
Comment Review Table
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Comment Number	Page & Paragraph	Comment
1	General	WAC 173-340-450 mandates that the clean up must comply with MTCA clean up standards and the requirements for the selection of the standards. WAC 173-340-820 states the information that a sampling and analysis plan shall contain for a MTCA clean up.
2	Page 1, First Paragraph	Change the second sentence to include the sampling of all COC. See Table 830-1, Required Testing for Petroleum Releases (New MTCA, Amended 2-12-01, 173-340 WAC) the fuel in the 384 tank were Diesel Range and Heavy Oils (Bunker).
3	Page 4, Third Paragraph	The COC must include the required tests for Diesel Range and Heavy Oils in Table 830-1. See Table 830-1 and footnotes (New MTCA, Amended 2-12-01, 173-340 WAC).
4	Page 5, Table 2	WAC 173-340-820 states that the SAP must contain the organizations that are responsible for sampling and analysis activities. Complete the table replacing TBD with the appropriate organization.
5	Page 5, Table 2 Project Org.	Add a paragraph stating that Ecology will be notified when both the field screening and samples for laboratory analysis takes place. Ecology may take split samples for laboratory analysis.
6	Page 6, Table 3	Add all COC (Table 830-1, MTCA, Amended 2-12-01, 173-340 WAC) and the appropriate analytical method, parameters, regulatory limits, and detection limits. (Use Method A Soil Cleanup levels for Industrial Properties, Table 745-1 page235). Note: Diesel and Heavy Oils cleanup level is at 2000 mg/kg.
7	Page 6, Bottom paragraph	Change site assessment to site characterization. The site assessment was done prior to the tank removal. This is now the SAP process to characterize the extent of the contamination and to evaluate remedial action effectiveness.
8	Page 7, Last paragraph	Add clean up levels to be achieved for all COC from Table 830-1, Required Testing for Petroleum Releases.
9	Page 7, Last sentence	Add a sentence stating, "Soil samples for laboratory analysis will also be employed to determine if MTCA clean up levels have been achieved."
10	Page 8, First Paragraph	State what field screening methods are to be employed for which COC.
11	Page 8, Third Paragraph	The requirements for sample collection does not come from (Ecology 1992) The Guidance for Site Checks and Site Assessment for UST is guidance to be used up to the time that a release is either confirmed or disproved. The release was confirmed in June 1999. Once the release was confirmed, the follow-up investigation to characterize the extent of a confirmed release is conducted following guidance from Pub. #91-30, Guidance for the Remediation of Petroleum Contaminated Soil.

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Comment Number	Page & Paragraph	Comment
		Consider using the Visual Sampling Plan that is available online. This plan establishes a statistical and legally defensible sampling plan, which manages the uncertainty for environmental decision making. The sampling plan should establish a standard deviation. The std. deviation can be accomplished with appropriate field screening. Then a smaller number of samples can be taken for laboratory analysis.
12	Page 9, Figure 1	This may not be adequate sampling. See comment 11.
13	Page 10, Second Paragraph	Include appropriate analysis for all COC's, Table 830-1and foot notes.
14	Page 11, Table 6	Add all COC (Table 830-1) preservative, containers, holding times.
15	Page 11, Fourth Paragraph	State what field screen will be used for which COC (i.e., Immunoassay is available for petroleum hydrocarbons). *It is not necessary to screen for every COC. The field screening can be use to show the areas of higher concentration and to establish a std. deviation. This will then allow the use of Visual Sampling Plan to choose the right equation and establish the number of samples needed for laboratory analysis for all COC's.*