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STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

3100 Port of Benton Blvd • Richland, WA 99354 • (509) 372-7950

September 30, 2009

Ms. Monica R. Kembel, Facility Manager  
Liquid Waste and Fuels Storage  
CH2M HILL Plateau Remediation Company  
P.O. Box 1000, MSIN: S6-71  
Richland, Washington 99352

Re: CHPRC-0900486, letter from M.R. Kembel, CHPRC, to K. Conaway, Ecology, dated September 8, 2009, *Ecology Approval of the Solid Waste Landfill Lysimeter Leachate Characterization Evaluation under State Waste Discharge Permit ST4500*

Dear Ms. Kembel:

The Department of Ecology (Ecology) reviewed the 616 Solid Waste Landfill Lysimeter Wastewater Characterization Evaluation for treatment in the Effluent Treatment Facility (ETF) and the discharge to the State-Approved Land Disposal Site (SALDS).

Your permit required evaluation for a new influent source identified leachate with boron and total organic halides (TOX) treated before at ETF, but at lower influent concentrations. The boron and TOX levels in the leachate exceed the previously approved influent concentrations by greater than 20 percent. According to Permit Condition S9, Ecology's approval is required prior to treatment at ETF.

Your evaluation says that the source of these constituents is believed to be generated from janitorial wastes. And all other constituents in the Solid Waste Landfill lysimeter leachate wastewater are below their approved influent constituent concentrations. About 1200 gallons of leachate will be generated yearly. We recognize that in the past, this leachate was collected and sent to the 300 Area Treated Effluent Disposal Facility (300 Area TEDF) for treatment and discharge under the 300 Area TEDF National Pollutant Discharge Elimination System Permit (NPDES). The United States Department of Energy plans to close the 300 Area TEDF in September 2009.

ETF demonstrated and Ecology agrees that the ETF process is advantageous because the ETF process effectively removes dissolved inorganic salts (dissolved boron). The TOX contaminants are also removed and/or destroyed in the ultraviolet and oxidation treatment, and the reverse osmosis unit.

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ETF demonstrated in this evaluation, and Ecology agrees, that the ETF can effectively treat boron and TOX to below background levels. This is summarized in Table 1 of the submitted Characterization Evaluation. The information provided meets the requirement of Permit Condition S9, Influent Criteria.

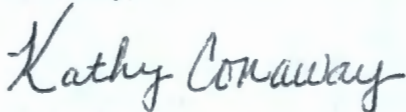
Ecology determined that the proposed new influent, lysimeter leachate wastewater with higher concentration of boron and TOX (described in the characterization and engineering evaluation along with the influent description), can be accepted into the ETF for treatment and discharged to SALDS. In addition, we agree that all known, available, and reasonable methods of treatment (AKART) were evaluated, and the ETF is considered as the best available technology/AKART for treatment of the field testing waste.

Ecology grants approval and the subject wastewater can be treated at the ETF facility.

ST 4500 Permit Condition S9 (3) requires that new influent streams be reported to Ecology each calendar quarter at the same time the Discharge Monitoring Report for that calendar quarter is submitted.

If you have any questions, please contact me at 509-372-7890.

Sincerely,



Kathy Conaway  
Liquid Waste and Fuels Storage Permit Manager  
Nuclear Waste Program

pll

cc: Dennis Faulk, EPA  
Jenise Connerly, USDOE  
Clark Gunion, USDOE  
Dale Jackson, USDOE  
Larry Romine, USDOE  
Matthew McCormick, USDOE  
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