



U.S. Department of Energy

OFFICE OF RIVER PROTECTION

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0054509

01-OPD-016

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Mr. Michael A. Wilson, Program Manager
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Department of Ecology
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**CESSATION OF PSYCHROMETRIC SURVEY DATA COLLECTION FROM
TANKS 241-C-105 AND 241-C-106**

As per discussion with your staff on February 15, 2001, the U.S. Department of Energy (DOE) requests the State of Washington Department of Ecology's concurrence to cease the collection of psychrometric data from Tanks 241-C-105 and 241-C-106 as of February 28, 2001. Your concurrence will be noted by your staff signing this letter and transmitting back to DOE.

The Hanford Federal Facility Agreement and Consent Order Milestone M-05-13-T01, "Initiate Monthly Psychrometric Measurements at 241-C-105 and 241-C-106, Commencing Fiscal Year 1993, to be Taken while Exhausters are Operating," was completed on January 31, 1993. Since that time, the psychrometric data has been collected as part of operational requirement, except during Tank 241-C-106 sluicing. Collected psychrometric data is attached (Attachment 1).

The purpose for taking the monthly data was to account for monthly cooling water addition to these tanks, and to determine whether liquid level changes in the tanks were due to leaks or evaporation. Both of these tanks were determined not to be leaking based on the liquid level measurements during and after process tests. Furthermore, later interim stabilization of Tank 241-C-105, the completion of Tank 241-C-106 sluicing, subsequent discontinuation of the cooling water addition, and the stable liquid level at Tank 241-C-106 made the continued collection of psychrometric data unnecessary.

- Tank 241-C-105: Based on the process test performed on Tank 241-C-105 from July 3, 1993, through December 12, 1994, water additions to this tank were ceased. The surface level, as determined by the Food Instrument Corporation liquid-level gauge, remained at approximately the same height for over 12 months after water additions were ceased (Attachment 2). The tank was declared stabilized on November 14, 1995. The tank now consists primarily of solids and interstitial liquids.

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- Tank 241-C-106: Assessment of Tank 241-C-106 level data concluded that evaporation in the tank behaved consistently during the years' of water addition. Sluicing operations in Tank 241-C-106 were completed in Fiscal Year 2000. As a result of the sluicing transfer of high-heat sludge, the temperature of the remaining supernate in Tank 241-C-106 has been reduced to less than 70°F. This resulted in cessation of water additions to this tank. The level measurements during and after sluicing operation have been stable. The supernate level did not change during the two-week process test in February and March of 2000, when the ventilation system was shut down minimizing loss due to evaporation (Attachment 3).

If you have any questions, please contact me, or your staff may contact Wahed Abdul, Operations Program Division, (509) 372-2355.

Sincerely,



James E. Rasmussen
Environmental Policy Advisor
Office of River Protection

OPD:WA

Concurred by:

Melinda Brown, Program Manager, Department of Ecology

Attachments (3):

1. Psychrometric data
2. Level data for tank 241-C-105
3. Level data for tank 241-C-106

cc w/o attach:

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