



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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

June 24, 2003

Mr. James E. Rasmussen, Director  
Environmental Division  
Office of River Protection  
United States Department of Energy  
P.O. Box 450, MSIN: H6-60  
Richland, Washington 99352

RECEIVED  
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EDMC

Dear Mr. Rasmussen:

Re: Letter dated May 6, 2003, from J.E. Rasmussen, ORP, to M.A. Wilson, Ecology,  
Process for Completing Notices of Deficiencies (NOD) for RPP-13744,  
"Single-Shell Tank System Closure Plan," Revision 0

59419

Thank you for providing the Washington State Department of Ecology (Ecology) with a request to consider the United States Department of Energy (USDOE), Office of River Protection (ORP) suggested component closure activity review cycle. Ecology has not received a document that would allow us to complete an accelerated review cycle, therefore, after detailed internal reviews, Ecology finds that we cannot agree to an accelerated or compressed review schedule. Through the Hanford Federal Facility Agreement and Consent Order (HFFACO) process, Ecology will work with the ORP to establish milestones as a guide for scheduling the review of HFFACO primary documents and closure plans. It is Ecology's full intent to review any such documents in a timely manner.

As Ecology has stated before, the length of any of our reviews will be dependent upon receiving clearly written, concise, and complete documents. USDOE, CH2M Hill Hanford Group, Inc. (CHG) and Ecology are participating in meetings to address over 200 Notice of Deficiencies (NOD's) for C-106. Ecology understands CHG intends to be responsive to Ecology comments and provide a document that will meet Ecology requirements. Ecology is hopeful that these meetings will provide a mutual understanding of the criteria necessary for such a document.

Additionally, at a recent CHG briefing for Ecology, CHG informed Ecology of ORP's intent to retrieve and close the 241-C-200 series tanks. Announcing a unilateral intention at a meeting is not appropriate. Further, closure of the 200 series tanks will not be allowed until all requirements are met, including retrieval of remaining wastes from each tank to the extent technically possible. You should also note that unilaterally moving forward with a 200 series

Mr. James R. Rasmussen  
June 24, 2003  
Page 2

tank closure initiative would be inconsistent with the criteria for single-shell tank (SST) retrieval sequencing, as described in RPP-8554 Rev 1. Specifically, Ecology does not consider the 241-C-200 series tanks to be relatively high-risk tanks, the waste is not in liquid form, and the volume of waste is very small. Ecology would prefer that ORP work with our staff to establish retrieval criteria that considers other appropriate aspects of retrieval for prioritizing and sequencing tank retrievals, or use its limited resources to address high-risk tanks first, as the agencies have previously agreed to.

If ORP chooses to move ahead independently on low risk tanks, you are still obligated to follow the process required by HFFACO for Ecology approval of retrieval activities and additional closure actions of SST components (tanks, piping, and ancillary equipment), as provided in the attachment to this letter. To meet HFFACO milestones M-45-06, M-45-06-T03, and M-45-06-T06, Ecology understands that it will be necessary to integrate all component closure activities, including retrieval. It is essential that USDOE plan these activities within the framework of HFFACO and Washington Administrative Code (WAC) 173-303 Dangerous Waste Regulations.

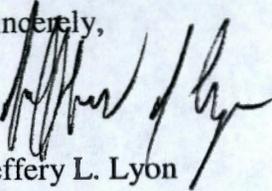
Ecology will perform a timely, thorough review of the required documentation. To facilitate that review and approval, CHG and USDOE should submit documents that:

1. Are true, accurate and complete (i.e., technically edited to be consistent and integrated) and provide all required information (i.e., require resolution of few "Notice of Deficiencies"). No draft submittals are acceptable except under exceptional circumstances as agreed to by Ecology.
2. Clearly document all regulatory (including HFFACO) requirements and explicitly describe how USDOE/CHG intends to meet those requirements.
3. Clearly identify all existing data gaps and provide a schedule for when USDOE can provide the missing data.
4. Clearly identify necessary additional closure requirements to meet other stakeholder and public concerns.

Mr. James E. Rasmussen  
June 24, 2003  
Page 3

If you have any questions concerning this letter, please call me at (509) 736-3098.

Sincerely,



Jeffery L. Lyon  
Tank Waste Storage Project Manager  
Nuclear Waste Program

JLL:lkd  
Attachment

cc: Paul Dunigan, USDOE-RL  
Howard Ganon, USDOE-ORP  
Roy Schepens, USDOE-ORP  
Jackie Hanson, INNOV  
Dale Allen, CHG  
David Amerine, CHG  
Edward Aromi, CHG  
Janet Badden, CHG  
William Dixon, CHG  
Ryan Dodd, CHG  
Joel Eacker, CHG  
Moussa Jarayssi, CHG  
Todd Martin, HAB  
Stuart Harris, CTUIR  
Pat Sobotta, NPT  
Russell Jim, YN  
Ken Niles, OOE  
**Administrative Record**

# **ATTACHMENT**

**Component Closure Process as Defined in TPA  
Change M-45-02-03**

## Component Closure Process as Defined in TPA Change M-45-02-03

1. ORP must submit a Functions and Requirements (F&R) document as a primary document for Ecology review and approval. The F&R document must:
  - a. Be adequate to allow Ecology to assess the adequacy of the project systems
  - b. Establish specifications for:
    1. the tank system [including Retrieval and Closure systems]
    2. Leak Detection Monitoring and Mitigation, and
    3. scoping level retrieval performance evaluation (RPE) for individual components.
  - c. Include information on environmental and human health risk associated with:
    1. estimated volumes to be retrieved,
    2. maximum volume which could be leaked during retrieval, and
    3. risk from residual waste.
  - d. Detail the basis of calculation within the vadose zone, detailing known and estimated:
    1. radionuclide [and dangerous waste] contamination concentration and
    2. contaminant migration.
  - e. Incorporate Lessons Learned from projects that are both:
    1. project specific and
    2. from previous USDOE and industry related experiences, for:
      - a. LDMM,
      - b. retrieval instrumentation, and
      - c. operational experience.
  - f. Document all pertinent retrieval and closure requirements, e.g., those specific to the extent retrieval is necessary to allow closure.
  - g. Contain LDMM Strategy [along with any implementation plan or schedule], prior to the initiation of Design.
2. ORP must complete the Component Waste Retrieval Design. [It is Ecology's expectation that sufficient documentation will be provided to determine if the Design is consistent with the specification described in the F&R.]
3. ORP must complete the Component Retrieval System Construction. [It is Ecology's expectation that sufficient documentation will be provided to determine if construction is consistent with design.]
4. ORP must submit a certified (Framework) SST System Closure Plan Modification, and a specific component closure plan, as an application for modification to the Hanford site-wide hazardous waste facility permit. This will include:
  - a. All closure plan elements [specified in WAC 173-303-610];
  - b. The characterization approach for residual wastes for the
    1. risk assessment,
    2. Land Disposal Restriction (LDR), and

3. Washington State Hazardous Waste Management Act.
  - c. Additionally, to support regulatory compliance requirements for the closure plan and characterization approach, the document will include (but not be limited to):
    1. characterization needs,
    2. work requirements,
    3. work schedules, and
    4. contaminants of concern.
  - d. A risk assessment methodology inclusive of the
    1. assumptions,
    2. approach,
    3. conceptual model, and
    4. metrics (e.g. point of compliance and receptor scenarios).
5. ORP must complete Waste Retrieval to the extent technically possible. All actions listed below must be completed in the order listed below.
- a. Complete retrieval, per the Dangerous Waste Regulations, TPA milestone M-45, and the F&R requirements.
  - b. Characterize remaining wastes or document there are no wastes remaining.
  - c. Complete an Ecology approved risk assessment for any residuals remaining.
  - d. The Waste Retrieval and Closure Plan must be approved by Ecology and incorporated into the Site-Wide Permit.
  - e. In those rare cases when technology has failed to meet retrieval requirements, and Ecology has been notified of the level of efforts, as well as ORP's subsequent failure, ORP must submit and receive approval of an exception as defined in Appendix H of the TPA.
  - f. Submittal of the "Waste Retrieval and Closure" project report, which includes (1) project data and (2) project results.
6. ORP must complete necessary field project actions required by the closure plan.
7. ORP must have closure certified by an Independently Qualified Registered Professional Engineer.