



U.S. Department of Energy  
**Office of River Protection**

P.O. Box 450, MSIN H6-60  
Richland, Washington 99352

APR 18 2008

08-TPD-017

Mr. Scott C. Flanders, Director  
Environmental and Performance  
Assessment Directorate  
Division of Waste Management  
and Environmental Protection  
U.S. Nuclear Regulatory Commission  
11555 Rockville Pike  
Rockville, Maryland 20852

Dear Mr. Flanders:

UPDATE TO THE BASIS FOR EXCEPTION TO THE HANFORD FEDERAL FACILITY  
AGREEMENT AND CONSENT ORDER (HFFACO) RETRIEVAL CRITERIA FOR SINGLE-  
SHELL TANK (SST) 241-C-106, REQUEST FOR NUCLEAR REGULATORY  
COMMISSION (NRC) REVIEW

- References:
1. ORP letter from R. J. Schepens to J. R. Strosnider, NRC, "Interagency Agreement Between the U.S. Department of Energy (DOE), Office of River Protection (ORP) and the Nuclear Regulatory Commission (NRC) for Management of Tank Waste at the Hanford Site," 04-TPD-085, dated August 20, 2004.
  2. ORP letter from R. J. Schepens to A. H. Bradford, NRC, "Request for Nuclear Regulatory Commission (NRC) Review of Basis for Exception to the Hanford Federal Facility Agreement and Consent Order Retrieval Criteria for Single-Shell Tank (SST) 241-C-106," 04-TPD-095, dated October 6, 2004.
  3. NRC letter from A. H. Bradford to R. J. Schepens, ORP, "Request for Additional Information on the Office of River Protection's Basis for Exception to the Hanford Federal Facility Agreement and Consent Order Waste Retrieval Criteria for Single-Shell Tank 241-C-106," dated January 19, 2005.
  4. ORP letter from R. J. Schepens to S. C Flanders, NRC; "Submittal of the U.S. Department of Energy (DOE), Office of River Protection (ORP) Hanford Single-Shell Tank (SST) Performance Assessment (PA), DOE/ORP-2006-01, Revision 0, for Review," 06-TPD-028, dated May 18, 2006.

Enclosed for your review is the "Basis for Exception to the HFFACO Retrieval Criteria for SST 241-C-106," RPP-20658, Revision 3. The previous revision of the C-106 exception request, provided to the NRC in Reference 2, has been updated to address comments received from the NRC in Reference 3; it includes an update to the estimates of risk from the Tank C-106 residual waste based on the results of the Hanford SST PA, DOE/ORP-2005-01. The SST PA was

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previously provided to the NRC in Reference 4. Additional changes to the Tank C-106 exception request have been made in consideration of comments received from the U.S. Environmental Protection Agency (EPA) and the Washington State Department of Ecology (Ecology).

The Tank C-106 exception request provides the technical basis underlying the ORP finding that retrieval of waste from Tank C-106 is complete in accordance with the HFFACO. The HFFACO establishes waste retrieval criteria that are applied on a tank-by-tank basis. If DOE does not believe the criteria are achievable for a specific tank, then DOE must submit a request for an exception to EPA and Ecology for approval in accordance with the procedure outlined in the HFFACO Appendix H. According to Attachment 2 of Appendix H, a request for an exception must include, as a minimum, the following information:

1. The reason DOE does not believe the waste retrieval criteria can be met.
2. Schedule, using existing technology, to complete retrieval to the criteria – if possible.
3. Potential for future waste retrieval technology developments that could achieve the waste retrieval criteria, including estimated schedules and costs for development and deployment of technologies.
4. Volume of waste proposed to be left in place, and its chemical and radiological characteristics.
5. Expected impacts to human health and the environment if the residual waste is left in place.
6. Additional information as required by EPA and/or Ecology.

Based on discussions with the EPA and Ecology, ORP believes that it would be helpful for NRC to review the waste retrieval actions completed at Tank C-106 as documented in RPP-20658.

Therefore, ORP requests the NRC to perform a technical review of RPP-20658 in accordance with the Interagency Agreement in Reference 1. In particular, ORP requests NRC to assess the soundness of ORP's conclusions regarding completion of retrieval. ORP also requests that NRC provide a final report documenting its conclusions at the completion of its review.

ORP is expressly not requesting assistance from the NRC regarding closure actions or residual waste determination matters with this submittal. ORP understands that the NRC may choose to review only some of the six information requirements for an exception request identified above, based on typical NRC review procedures for DOE tank waste removal activities.

To assist your review, we have also enclosed the "Stage II Retrieval Data Report for Single-Shell Tank 241-C-106" RPP- 20577, Revision 1, which provides data in support of RPP-20658. This document is an update to that provided to NRC in Reference 2.

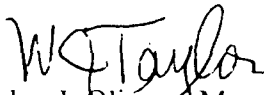
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If you have any questions, you may contact me, or your staff may contact **Delmar L. Noyes**, Acting Assistant Manager for Tank Farms Project, (509) 376-5166.

Sincerely,

  
for Shirley J. Olinger, Manager  
Office of River Protection

TPD: RAQ

Enclosures (2)

cc w/o encl:

M. L. Fuller, NRC  
M. J. Letourneau, EM-11  
M. N. Jaraysi, CH2M HILL  
D. L. Parker, CH2M HILL  
L. L. Lehman, CH2M HILL  
J. A. Hedges, Ecology  
J. J. Lyon, Ecology  
N. Ceto, EPA  
W. M. Hewitt, YAH  
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