



## OFFICE OF RIVER PROTECTION

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**FEB 27 2018**

18-ECD-0009

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U.S. Nuclear Regulatory Commission  
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Mr. Tappert:

REQUEST THE U.S. NUCLEAR REGULATORY COMMISSION CLOSE ITS REVIEW OF  
U.S. DEPARTMENT OF ENERGY EXCEPTION REQUEST FOR TANK 241-C-106 UNDER  
APPENDIX H OF THE HANFORD FEDERAL FACILITY AGREEMENT AND CONSENT  
ORDER

References: See page 3

This is to follow up on staff level discussions with U.S. Department of Energy (DOE) on the status of the U.S. Nuclear Regulatory Commission (NRC) review of the basis for exception to the Hanford Federal Facility Agreement and Consent Order (HFFACO) Appendix H exemption request on Tank 241-C-106. As you may recall, Tank 241-C-106 was retrieved in 1999 and in 2003, with an ending nominal volume of 370 cubic feet measured between 275 and 467 cubic feet with a 95 percent confidence level. The HFFACO retrieval requirement provided in Milestone M-045-00 is 360 cubic feet, or the limits of technology, whichever is less. This request is only for closure of consultation on the retrieval of Tank 241-C-106. The retrieval for Tank 241-C-106 did not meet the HFFACO standard by an estimated 10 cubic feet.

DOE submitted its Appendix H exception request initially on June 3, 2004. NRC staff provided DOE 16 Requests for Additional Information (RAI) comments on the 'Basis of Exception' in January 2005. DOE provided responses to those 16 RAI comments in August 2005. NRC staff has not officially commented on the responses provided by DOE. The DOE's second exception request for Tank 241-C-106 (document number 08-TPD-017) provided the technical basis underlying DOE's conclusion that the retrieval of waste is complete in accordance with HFFACO Milestone M-045-00 and Appendix H. In 2009, NRC reviewed the Tank 241-C-106 retrieval. A common theme among the 28 *Requests for Additional Information* in the January 30, 2009, letter (see Reference #13) was that the retrieval should be considered with the entire Tank Farm (called Waste Management Area-C, or WMA-C).

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As part of the NRC's formal review of the WMA-C Performance Assessment and final risk decision for WMA-C closure, NRC will evaluate the post-retrieval waste volume estimates from all the tanks at the WMA-C including the remaining volume in Tank 241-C-106 so that technical issues documented in RAIs related to Tank 241-C-106 retrieval will be incorporated into the evaluation. DOE believes that this approach by NRC allows DOE to transition the decision on Tank 241-C-106 retrieval completion and move into the follow on closure process under the HFFACO.

The NRC personnel have participated in the past twelve WMA-C Performance Assessment working sessions, which, in an open and collaborative process, was used to discuss both the NRC's 2009 RAIs and the exposure scenarios created in the WMA-C Performance Assessment. The DOE Low-Level Waste Disposal Federal Review Group review of this Performance Assessment has had both NRC and Washington State Department of Ecology observation-level participation of involvement. NRC will be formally reviewing the final risk decision for the upcoming WMA-C closure in the near future. DOE must submit the results of the NRC consultation process to Washington State Department of Ecology and U.S. Environmental Protection Agency, Region 10.

Therefore, DOE is hereby requesting that NRC close its review of the DOE exception request for Tank 241-C-106 under the HFFACO. This step is not a decision about the NRC consultation for a waste incidental to reprocessing under DOE O 435.1, nor a consultation on closure of Tank 241-C-106. In the near future, NRC will formally review the final risk decision for all of the 16 primary tanks, 5 ancillary tanks, 7 diversion boxes, and past operational releases with the upcoming closure decision in context of the entire WMA-C. NRC's decision to close its basis of exception review for Tank 241-C-106 should be documented in a letter to DOE.

If you have any questions, please contact Chris J. Kemp, Director, Environmental Compliance Division, (509) 373-0649.



Brian T. Vance  
Manager

ECD:CJK

- References:
1. ORP letter from R.J. Schepens to M.A. Wilson, Ecology, "Completion of Hanford Federal Facility Agreement and Consent Order (HFFACO) Target Date M-45-05L-T01 and Partial Completion of Target Date M-45-05M-T01," 04-TPD-025, dated February 27, 2004.
  2. ORP letter from R.J. Schepens to M.A. Wilson, Ecology, "Completion of Tank 241-C-106 Waste Retrieval," 04-TPS-030, dated March 11, 2004.
  3. ORP letter from R.J. Schepens to M.A. Wilson, Ecology, "Request for Exception to the Hanford Federal Facility Agreement and Consent Order (HFFACO) Waste Retrieval Criteria, Retrieval Data Reports for Single-Shell Tank (SST) 241-C-106; HFFACO Milestones M-45-00 and M-45-05H, and Target Dates M-45-05L-T01 and M-45-05M-T01," 04-TPD-059, dated June 3, 2004.
  4. Ecology letter from M. Wilson to R.J. Schepens, ORP, "Letter from R. Schepens, USDOE, to M. Wilson, Ecology, dated June 3, 2004, 'Request for Exception to the Hanford Federal Facility Agreement and Consent Order (HFFACO) Waste Retrieval Criteria, Retrieval Data Reports for Single-Shell Tank (SST) 241-C-106; HFFACO Milestones M-45-00 and M-45-05H, and Target Dates M-45-05L-T01 and M-45-05M-T01,' with 4 Attachments  
  
Letter to R. Schepens, USDOE, from J. Lyon, Ecology, dated February 12, 2004, in Response to Letter from USDOE 'Results of the Video Camera/CAD Model System Test, RPP-18744, Rev. 0,' dated December 17, 2003," dated August 10, 2004.
  5. ORP letter from R.J. Schepens to N. Ceto, EPA, "Request for Exception to Hanford Federal Facility Agreement and Consent Order (HFFACO) Waste Retrieval Criteria, Retrieval Data Reports for Single-Shell Tank (SST) 241-C-106," 04-TPD-094, dated October 6, 2004.
  6. 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.
  7. Ecology letter from J.J. Lyon to R.J. Schepens, ORP, "Retrieval of Single-Shell Tank 241-C-106," 0403348, dated November 5, 2004.

8. 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.
9. ORP letter from R.J. Schepens to E.S. Aromi, CH2M HILL, "Response to Request for Additional Information (RAI) on the U.S. Department of Energy, Office of River Protection (ORP) Basis for Exception to the Hanford Federal Facility Agreement and Consent Order Waste Retrieval Criteria for Single-Shell Tank (SST) 241-C-106," 05-TPD-015, dated February 1, 2005.
10. 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 Initial Single-Shell Tank (SST) Performance Assessment (PA), DOE/ORP-2006-01, Revision 0, for Review," 06-TPD-028, dated May 18, 2006.
11. ORP letter from S.J. Olinger to S.C. Flanders, NRC, "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," 08-TPD-017, dated April 18, 2008.
12. ORP letter from S.J. Olinger to J.A. Hedges, Ecology, and N. Ceto, EPA, "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," 08-TPD-019, dated April 18, 2008.
13. NRC letter from P.M. Bubar to S.J. Olinger, ORP, "Request for Additional Information on Update to the Basis for Exception to the Hanford Federal Facility Agreement and Consent Order Retrieval Criteria for Single-Shell Tank 241-C-106, Request for U.S. Nuclear Regulatory Commission Review," dated January 30, 2009.
14. ORP letter from S. Charboneau to P.M. Bubar, NRC, "Request for Additional Information on 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," 09-TPD-015, dated March 16, 2009.