

September 7, 2010

Mr. Frank Marcinowski  
Deputy Assistant Secretary for Logistics  
and Waste Disposition Enhancements  
EM-10/Forrestal Building  
U.S. Department of Energy  
1000 Independence Avenue, S.W.  
Washington, DC 20585

SUBJECT: DISTRIBUTION OF NUREG-1911, REVISION 2, "NRC PERIODIC COMPLIANCE MONITORING REPORT FOR U.S. DEPARTMENT OF ENERGY NON-HIGH-LEVEL WASTE DISPOSAL ACTIONS; ANNUAL REPORT FOR CALENDAR YEAR 2009"

Dear Mr. Marcinowski:

Enclosed is the U.S. Nuclear Regulatory Commission (NRC) staff's report of its monitoring of U.S. Department of Energy (DOE) non-high-level waste disposal actions in calendar year (CY) 2009, pursuant to Section 3116(b) of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 (NDAA). The NRC staff has prepared this report in accordance with NUREG-1854, "NRC Staff Guidance for Activities Related to DOE Waste Determinations," issued August 2007. This report is the third annual report developed by NRC staff during the early phases of its monitoring activities pursuant to the NDAA.

As described in the Executive Summary of NUREG-1911, Revision 2, the NRC's staff monitoring in CY 2009 was based on two monitoring plans that it completed in accordance with the guidance in NUREG-1854. The monitoring plans cover DOE disposal actions at the Saltstone Facility at the Savannah River Site (SRS) in South Carolina and the Tank Farm Facility at the Idaho Nuclear Technology and Engineering Center at the Idaho National Laboratory (INL) in Idaho. No open activities have been identified as open noncompliant; however, the NRC staff opened one new Open Issue, Open Issue 2009-1, as a result of technical reviews and observation visits under its current monitoring activities. Open Issue 2009-1 requests that DOE provide additional support for assumptions made regarding technetium-99 characteristics in the Saltstone grout and Saltstone wastefrom.

Though no new monitoring activities were created in CY 2009, the NRC is planning one new monitoring activity for CY 2010. Next year, shortly after the NRC completes its review of the *2009 Performance Assessment for the Saltstone Facility at the Savannah River Site*, the Saltstone Facility monitoring plan will need to be revised to include monitoring activities that account for the new disposal cell design. This revision will begin in late CY 2010 and will have the potential to create new monitoring activities. The NRC plans no revisions to the INL monitoring plan in response to monitoring activities in CY 2009.

In CY 2007, the staff identified three open issues regarding disposal actions at the SRS Saltstone Facility, one of which was closed in CY 2008 (2007-3) regarding the risk significance of as-built vault conditions. In last year's report (for Calendar Year 2008), open issues 2007-1 and 2007-2 regarding the quality of as-emplaced saltstone grout remained open at the close of CY 2008. In 2009, as in 2008, the staff observed that DOE is making progress in obtaining data that will provide additional support for assumptions that were used in DOE's performance assessment in support of the SDF waste determination. However, because this information was still under review at the end of CY 2009, both Open Issue 2007-1 and Open Issue 2007-2 remain open.

Based on its observations, the NRC staff continues to conclude that there is reasonable assurance that the applicable criteria of the NDAA can be met if key assumptions made in the DOE waste determinations prove to be correct. In accordance with the requirements of the NDAA and consistent with the NRC's monitoring plans, the NRC staff will continue to monitor DOE disposal actions at SRS and INL. The monitoring activities are expected to be an iterative process and several onsite observation visits and technical reviews of various reports, studies, and other documents may be necessary to obtain the information needed to close all of the current open issues, as well as issues that may be opened in the future.

If you have any questions, please contact me at (301) 415-7437, or Mr. Nishka Devaser, Project Manager in the Division of Waste Management and Environmental Protection, at (301) 415-5196.

Sincerely,

**/RA/**

Larry W. Camper, Director  
Division of Waste Management  
and Environmental Protection  
Office of Federal and State Materials  
and Environmental Management Programs

Enclosure:  
NUREG-1911, Rev. 2, "NRC Periodic  
Compliance Monitoring Report for  
U.S. Department of Energy  
Non-High-Level Waste Disposal Actions,  
Calendar Year 2009"

cc w /enclosure:  
S. Wilson, SRS CAB  
Waste Management Committee Chair  
SRS CAB Librarian

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DATE	7/15 /10	7/19/10	7/22 /10	8/3/10	9/7/10

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