November 20, 2013

MEMORANDUM TO: Michael Norato, Chief
Materials Decommissioning Branch
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

FROM: John J. Hayes, Senior Project Manager ***/RA/***
Materials Decommissioning Branch
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

SUBJECT: PUBLICLY NOTICED CONFERENCE CALL SUMMARY

On November 13, 2013, a publicly noticed conference call was held between U.S. Nuclear Regulatory Commission (NRC) personnel from the Material Control, ISFSI, and Decommissioning Branch of NRC Region III, the Materials Decommissioning Branch of the Office of Federal and State Materials and Environmental Management Programs and representatives of the Westinghouse Electric Company (WEC) Hematite Facility located in Hematite, MO. A member of the public who participated in the call was David Adams from Senes, USA.

The purpose of the call was to discuss: (1) Westinghouse's withdrawal of a proposed revision to Chapter 14 of the Hematite Decommissioning Plan (DP); (2) Westinghouse's latest proposal for License Condition 18 to the Hematite License; and (3) Westinghouse's November 5, 2013, Supplementary Response to their 20.2002 Alternate Disposal Request for Additional Information (RAI) Responses. Enclosure 1 is the agenda for the call. Enclosure 2 is a listing of the call participants.

In the introductory remarks, the NRC explained that the conference call was a Category 1 Publicly Noticed Call in which members of the public were invited to listen to the call consistent with past practice. The public would be allotted the opportunity to communicate with the NRC after the business portion of the call but before the call was adjourned. The NRC stated that there was nothing which required the licensee to respond to any comments or questions from members of the public. However, while there was no requirement to respond, there was also nothing which precluded the licensee from responding to questions if the licensee chose to do so.

CONTACT: John Hayes, FSME/DWMEP
(301) 415-5928

The participants on the call introduced themselves. Westinghouse has concluded that the revision to Chapter 14 of the Hematite Decommissioning Plan (DP) is unnecessary. They are going to withdraw the submittal of DP Chapter 14, Revision 1.3. The existing DP Chapter 14 will remain in effect and continue to be the licensing basis for the facility. The NRC staff will provide a response to the Westinghouse proposal at the next publicly noticed call.

Enclosure 3 was Westinghouse response to the NRC's November 6, 2013 proposal for License Condition No. 18. The NRC staff indicated they had no issues with Westinghouse's proposal.

On November 5, 2013, Westinghouse provided their second response (ML13310A625) to the NRC staff's July 10, 2013, RAI. The staff provided Enclosure 4 to Westinghouse and members of the public prior to the call. Enclosure 4 identifies the NRC staff questions as to how Westinghouse could ensure that US Ecology Idaho would not generate a solution which would have U-235 concentration in the liquid which would pose a criticality safety issue.

Members of the public were asked whether they had any questions or comments regarding the discussion. They had none.

Enclosures:
1. Agenda
2. Attendee List
3. NRC's Proposed License Condition No. 18
4. NRC Comments on Chemical Treatment of Hematite Material at USEI

The participants on the call introduced themselves. Westinghouse has concluded that the revision to Chapter 14 of the Hematite Decommissioning Plan (DP) is unnecessary. They are going to withdraw the submittal of DP Chapter 14, Revision 1.3. The existing DP Chapter 14 will remain in effect and continue to be the licensing basis for the facility. The NRC staff will provide a response to the Westinghouse proposal at the next publicly noticed call.

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NAME	JHayes	SAchten	MNorato	JHayes
DATE	11/19/13	11/19/13	11/20/13	11/20/13

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FORTHCOMING PUBLIC MEETING ON WESTINGHOUSE HEMATITE DECOMMISSIONING TECHNICAL DISCUSSIONS

Agenda
Wednesdays, November 13, 2013
11:00 AM – 12:00 PM

- *Introductory Remarks – NRC*

- *Topics for Discussion –*
  - Revision to Chapter 14 of Hematite DP
  - Proposed License Condition No. 18
  - Nov 5, 2013 Westinghouse Supplementary Response to 20.2002 Alternate Disposal Request

- *Public's Opportunity for Questions - Public*

- *Concluding Remarks – NRC*

Enclosure 1

Attendance List
November 13, 2013 Conference Call

Name	Organization	Title
Mike LaFranzo	NRC, Region III	Senior Health Physicist, Material Control, ISFSI and Decommissioning Branch
Leah Parks	NRC, FSME	Senior Performance Analyst, Performance Assessment Branch
Robert Orlikowski	NRC, Region III	Chief, Material Control, ISFSI and Decommissioning Branch
Kevin Davis	Westinghouse	Licensing/Environmental Manager, Hematite Decommissioning Project
Dennis Richardson	Westinghouse	Deputy Director, Hematite Decommissioning Project
Joe Smetanka	Westinghouse	Director, Hematite Decommissioning Project
Derrick Mann	Westinghouse	Nuclear Criticality Safety Specialist
John Hayes	NRC, FSME	Senior Project Manager, Materials Decommissioning Branch,
Mike Norato	NRC, FSME	Chief, Materials Decommissioning Branch,
David Adams	SENES (member of the public)	Health Physicist

NRC's Proposed License Condition No. 18

18. The licensee SHALL evaluate the impact of any change to its methods or procedures for performing surveys or visual inspection of buried or exhumed waste and/or contaminated soil, whether *in situ* or *ex situ*, on its ability to comply with the applicable criticality safety mass and concentration limits and associated controls established in a nuclear criticality safety assessment/evaluation or in Condition 14. If the evaluation determines that the change has the potential to increase or decrease the effectiveness or efficiency of the licensee's methods for complying with these limits, then the licensee SHALL provide the NRC a copy of the procedure and the evaluation within 48 hours after its approval.

U.S. Nuclear Regulatory Commission Comments on Chemical Treatment of Hematite Material at US Ecology Idaho

While the proposed Hematite soil processing involves low concentrations of U-235, there are large volumes and the potential for containing many Kgs of U-235. The aqueous soil processing operations have the potential for causing some of the uranium to move from the soil phase to an aqueous phase. The uncertainty about the soil treatment chemical additives, the amount of water used for individual treatment batches, and the subsequent treatment and disposition of water following soil treatment all contribute to uncertainty about the potential for concentration of U-235.

While the U.S. Nuclear Regulatory Commission (NRC) staff recognizes the limited potential for the soil processing operations to produce U-235 concentrations that present a nuclear criticality risk, it does require additional information on controls that Westinghouse Electric Company will impose on the soil processing operations that involve U-235 before the staff can conclude that the risk of criticality is being adequately managed.

The supplemental information provided in Westinghouse's November 5, 2013, submittal needs enhancements with respect to the information provided concerning the treatment for the removal and/or stabilization of volatile organic compounds and other chemicals associated with the waste material. Since that the amount and types of reagents added to a batch are dependent upon the constituents of the material, it appears a bounding calculation may be difficult if not impossible to provide. From Westinghouse's submittal, the NRC staff has concluded a stoichiometric equation is utilized to determine the additives to the tank when the constituents of the material to be treated are identified. The NRC staff's concerns are associated with how USEI ensures that the solution generated during the treatment process does not result in a U-235 concentration of 11 g/L or greater.

In order for the NRC staff to be able to approve the chemical treatment of materials at US Ecology Idaho, the NRC staff needs to be assured that Westinghouse has in place adequate controls to ensure that the solution concentration does not reach 11 g/L. The additional controls could involve a combination of actions as appropriate such as batch-specific sampling prior to treatment operations, batch-specific calculations prior to treatment operations, batch-specific measurements after soil treatment operations, and commitments for the treatment of any liquids with higher concentrations of U-235.