

## Hematite Amendment 52 Resolution Requests for Additional Information

- 1. Comment:** Insufficient information is provided on the manner in which building rubble debris will be characterized for waste disposal purposes.

**Basis:** In the March 22, 2010 submittal (ML100830643) WEC states that "Waste Characterization will be performed as appropriate for waste disposal purposes in accordance with the approved procedures". However, it is not clear what action will be implemented as a part those approved procedures.

**Path Forward:** Please provide detailed information on the action that Westinghouse will follow to perform waste characterization to facilitate proper storage, segregation and disposal.

### Westinghouse Response:

HDP's NRC license allows HDP to transfer radioactive waste, but not to directly dispose of waste. The regulation of 10 CFR 70.42, Transfer of Special Nuclear Material, allows HDP, as a licensee, to transfer SNM, and 10 CFR 20.2001, General Requirements, under Subpart K - Waste Disposal (specifically §20.2001 (a)(1)) allows a licensee to dispose of waste by transfer to an authorized recipient. 10 CFR 20.2006, Transfer for Disposal and Manifests, requires completion of Manifest information specified in Appendix G to 10 CFR Part 20. NRC Low-Level Waste Licensing Branch Technical Position on Radioactive Waste Classification, May 1983, and the waste acceptance criteria for the selected processing and/or disposal facility apply for the waste to be transferred for disposal.

The NRC guidance of Information Notice No. 90-09, Extended Interim Storage Of Low-Level Radioactive Waste By Fuel Cycle And Materials Licensees, applies for waste which is to be stored for an extended period, which is not HDP's intent in this case.

To provide the specific information that was mentioned in the March 22, 2010 submittal (HEM-10-26; ML100830643), radiological characterization work was implemented during 2009. The radiological characterization plan of Westinghouse letter dated December 18, 2008 (HEM-08-108; Attachment to HEM-08-111, dated December 18, 2008) was approved by the NRC as part of the Confirmatory Action Letter 3-08-005, dated December 15, 2009 (ML083510194) and its addendums. The work directed the collection of radiological survey data and the collection of samples of building surfaces for subsequent laboratory analysis. These data were used to support detailed calculations of the amount and concentration of residual radioactivity within the equipment and above-grade surfaces of the Process Buildings. The results of the measurements and calculations performed in 2009 were provided to NRC in Westinghouse (E. K. Hackmann) letter to NRC (Document Control Desk), HEM-09-121, dated 10/23/09, "Hematite Decommissioning Project Characterization Summary Report of the 2009 Characterization". The NRC inspections and reviews which resulted in closure of the Confirmatory Action Letter thoroughly examined the characterization of the contamination in the process buildings (NRC letter dated April 2, 2010; ML100920576). The following two documents attached to Westinghouse letter HEM-10-47, dated May 14, 2010 (ML101410359) provide the technical bases for the building debris waste to be disposed:

Attachment 2: HDP-TBD-WM-901, Revision 0, "Scaling Factors for Radioactive Waste Associated with the Process Buildings"

Attachment 3: HDP-TBD-WM-902, Revision 0, "Building Demolition Debris Volume and Weight Estimate"

The information obtained from the radiological characterization work referenced above will be used to determine the segregation requirements for subsequent packaging, processing and/or disposal. Segregation requirements will be based on the waste acceptance criteria for the facility selected for processing and/or disposal. The disposal vendor has not yet been chosen since the building demolition is not known, and therefore the waste disposal need date is not known.

With regard to characterization to facilitate storage, the information obtained from the characterization plan implemented in 2009 provided the basis to conclude that controls for nuclear criticality safety are not required for storage. However, in general, Westinghouse plans to proceed directly from building demolition to waste packaging for transfer to processing and/or disposal. Material handling, staging and packaging will be performed within properly posted and controlled areas.

- 2. Comment:** Westinghouse has provided insufficient details on the practices they will implement to prevent the spread of radioactive contamination during the interval between demolition and disposal of building debris.

**Basis:** In Section 5.1.3 of the March 22, 2010 Westinghouse submittal Westinghouse provided certain explanation of engineering controls measures that will be employed for dust control during any extended period of inactivity. However, Westinghouse has not provided sufficient details on the controls they intend to implement to prevent the spread of contamination for the time period from building demolition until offsite shipment.

**Path Forward:** Please provide additional details of the means Westinghouse will employ to prevent the spread of radioactive contamination during the time from building demolition until its shipment offsite.

Westinghouse Response:

The original Westinghouse building demolition request (dated October 5, 2004; ML042860234) included an Environmental Report. Sections 4.12.13 and 4.12.14 of that Environmental Report included descriptions of contamination controls and methods for waste segregation and storage.

Westinghouse generally plans to proceed directly from building demolition to waste packaging for transfer to processing and/or disposal. There are no plans for extended on-site waste storage. As stated in Westinghouse letter HEM-09-141, dated December 16, 2009 (ML093570277), the HDP Environmental Monitoring and Control Program as described in Section 8 of the NRC SER for Amendment 52 remains valid. Since the environmental monitoring program is a condition of the license, that program would remain in effect if there were any need for temporary on-site storage of waste.