

February 26, 2013

Mr. Robert D. Copp  
Director, Hematite Decommissioning Project  
Westinghouse Electric Company  
3300 State Road P  
Festus, MO 63028

SUBJECT: DISPOSAL OF SANITARY WASTE SOLIDS AND WATER TREATMENT  
MATERIALS AT U.S. ECOLOGY IDAHO

Dear Mr. Copp:

In discussions with the staff of the U.S. Nuclear Regulatory Commission (NRC), Messrs. Dennis Richardson and Kevin Davis of your staff have indicated that operation of the Hematite sanitary waste system has resulted in the collection of radiologically contaminated waste solids. Messrs. Richardson and Davis have also indicated that it is Westinghouse's intent to take such solids and mix them with the material that is being sent to, and disposed of, at the U.S. Ecology Idaho (USEI) burial facility located in Grand View, Idaho. It is Westinghouse's impression that such mixing and disposal at the USEI facility was permissible since it is Westinghouse's belief that these actions were covered with the issuance of Amendment 58 to the Hematite materials license (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML111441087, ML112560105, and ML112560193).

Amendment 58 approved Westinghouse's May 21, 2009, 10 CFR 20.2002 alternate disposal request (ADAMS Accession Nos. ML091480071). Messrs. Davis and Richardson have raised this issue with the NRC staff to ensure that Westinghouse's interpretation of the allowable actions under Amendment 58 is accurate and that the NRC has no issues with such a disposal.

In support of Westinghouse's disposal of such material at USEI, your representatives have made reference to Enclosure 5 of Westinghouse's July 24, 2012, response to the NRC's Request for Additional Information (RAI) associated with the January 19, 2012, alternate disposal request (ADAMS Accession Nos. ML12017A188, ML12017A189, and ML12017A190). Westinghouse believes that disposal of the sanitary waste solids at USEI were identified in that RAI response.

The NRC staff have reviewed the May 21, 2009, 10 CFR 20.2002 Westinghouse submittal and supporting documentation and have been unable to identify anywhere in that documentation where the disposal of sanitary waste solids at USEI was proposed. The NRC staff has also reviewed the original January 16, 2012, submittal for another Westinghouse 10 CFR 20.2002 alternate disposal request. The Executive Summary of the January 16, 2012, submittal, which is contained in HEM-12-2, does not refer to the disposal of sanitary waste sludge at USEI. In that Executive Summary Westinghouse clearly identifies as the candidate material for disposal at USEI solid materials consisting of a mixture of concrete/asphalt, piping, soil, and miscellaneous equipment. Chapter 5 of the January 16, 2012, submittal contains a description of the physical and chemical material to be disposed, and Section 5.2 of that Chapter identifies water treatment system equipment as possible candidate material for disposal at USEI and it

discusses the potential for such equipment to have surface contamination. However, the section is silent with respect to any solids which might be in the equipment. Further discussions about piping and soils are also silent about possible solids. HDP-TBD-WM-906, which is Enclosure 2 of the January 19, 2012, submittal, identifies and characterizes the waste which will be disposed of at USEI. Sanitary waste sludge is not identified. Neither of the *Federal Register* Notices associated with the May 21, 2009, submittal (74 FR 31994; July 6, 2009, "Notice of License Amendment Request of Westinghouse Electric Company LLC for Hematite Decommissioning Project, Festus, MO and Opportunity To Request a Hearing,") or the January 16, 2012, submittal (77 FR 16077; March 19, 2012, "License Amendment Request From Westinghouse Electric Company, LLC, Hematite Decommissioning Project," identified either solids from the sanitary waste treatment system (WTS) or from WTS as being potentially disposed at USEI.

The NRC staff has also reviewed Enclosure 5 of the July 24, 2012, RAI response. It should be noted that Enclosure 5 (NSA-TR-HDP-11-11, Rev 1) is a Nuclear Criticality Safety Assessment document. The NRC only reviewed that document from the perspective of nuclear criticality safety. It was not assessed for its potential impacts in either the dose or health physics areas as that was not the purpose of the document.

In Section 1.4 of Enclosure 5 it is indicated that solids recovered from the WTS are a candidate for material going to USEI. However, there is no indication that the solids from the sanitary WTS are intended for disposal at USEI. Section 1.4.4 of Enclosure 5 seems to discuss the sewage/septic treatment tank and drain fields and drain lines from equipment and piping standpoint and the solids only with respect to assaying for determining whether the material contained within the piping and tanks is nuclear criticality safety exempt material. Section 2.4.4.1 of Enclosure 5 discusses the shipment of sewage/septic treatment systems and concrete septic tank to USEI, but is silent with respect to the contents of such equipment.

Based upon the above information, the NRC staff concludes that the sanitary waste sludge was not approved as part of Amendment 58 nor has it been considered as part of the staff's review of Westinghouse's January 2012 10 FR 20.2002 alternate disposal request. Therefore, if Westinghouse wishes to send radiologically contaminated sanitary waste sludge to USEI, then a new alternate disposal request under 10 CFR 20.2002 specifically addressing this material is required.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

R. Copp

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Please contact me if you have any questions concerning the above at (301) 415-5928 or by email at [John.Hayes@nrc.gov](mailto:John.Hayes@nrc.gov).

Sincerely,

**/RA/**

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and Environmental Management Programs

Docket No.: 70-36  
License No.: SNM-33

Enclosure:  
Environmental Assessment

cc: Westinghouse – Hematite Service List

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Please contact me if you have any questions concerning the above at (301) 415-5928 or by email at [John.Hayes@nrc.gov](mailto:John.Hayes@nrc.gov).

Sincerely,

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Docket No.: 70-36  
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