

February 5, 2010

CAL 3-08-005C

Mr. E. Kurt Hackmann, Director
Hematite Decommissioning Project
Westinghouse Electric Company
Nuclear Fuels
3300 State Road P
Festus, MO 63028

SUBJECT: CONFIRMATORY ACTION LETTER THIRD ADDENDUM

Dear Mr. Hackmann:

The U.S. Nuclear Regulatory Commission (NRC) conducted an inspection between November 17, 2008 and June 24, 2009, at the Westinghouse Hematite decommissioning facility (Inspection Report No. 070-00036/08-002(DNMS)). In November 2008, the NRC was informed of previously unknown amounts of uranium-235 (U235) enclosed in piping and high efficiency particulate air (HEPA) filter units within the Process Building. A 24-hour report was subsequently submitted to the NRC on November 19, 2008 (Event Notification Report 44668), with a follow-up report on November 21, 2008. The two reports were based upon your determination that the quantity of U235 actually present was potentially greater than that previously reported to the NRC and used as a basis for an NRC License Amendment (Amendment 52, issued June 30, 2006) and might be of sufficient quantity to require criticality monitoring in accordance with 10 CFR 70.24.

A Confirmatory Action Letter (CAL) (CAL 3-08-005) dated December 15, 2008, was issued in response to the quantity of U235 found at the Westinghouse Hematite decommissioning facility. An addendum to the December 15, 2008, CAL was issued on July 9, 2009, (CAL 3-08-005A), following NRC's letter dated June 22, 2009, which granted Westinghouse an exemption from the requirements for a criticality monitoring system required by 10 CFR 70.24(a) and approved Westinghouse to conduct further characterization of the Process Buildings. By letter dated October 23, 2009, you submitted the *Hematite Decommissioning Project Summary Report of the 2009 Process Building Characterization*. Based on our review of that report, we issued a second addendum to the CAL on November 13, 2009, (CAL 3-08-005B). With the issuance of the second CAL Addendum, the only remaining issues to be addressed were Items 5 and 8.

By e-mail dated January 25, 2010, (see ADAMS ML100260733), Westinghouse requested CAL Item 8 be revised to allow for additional access to the Process Building. The NRC has performed a review of the request and as a result we are updating Item 8 of the CAL to allow in part, the additional access requested.

The following is the current status of the issues delineated in the December 15, 2008 CAL, as updated by the July 9, 2009 and November 13, 2009 CAL addenda:

Item (1) Closed by letter dated July 9, 2009, and superseded by Item 6.

- Item (2) Closed by letter dated July 9, 2009.
- Item (3) Closed by letter dated July 9, 2009.
- Item (4) Closed by letter dated July 9, 2009.
- Item (5) Before any Process Building piping or equipment removal or demolition activities are conducted, discuss the methodology, including safety precautions with the NRC.

The July 9, 2009, addendum to the CAL approved Westinghouse to conduct further characterization of the Process Buildings. This characterization was completed and documented on the Hematite Decommissioning Project Summary Report of the 2009 Process Building Characterization, which was provided to the NRC by letter dated October 23, 2009. A request for an exemption from the requirements of a criticality monitoring system was subsequently submitted by letter dated December 4, 2009.

Authorization to remove piping or equipment or to conduct demolition activities is dependent on the outcome of this exemption request which is still under NRC review. This item remains open.

- Item (6) Closed by letter dated November 13, 2009.
- Item (7) Closed by letter dated November 13, 2009.
- Item (8) Request an exemption from 10 CFR Part 70.24(a) demonstrating that accidental criticality alarms are not required, or provide a description of plans to re-install an accidental criticality alarm capability.

The licensee provided the results of the characterization of the Process Building in a Summary Report dated October 23, 2009. Based on those results, the licensee submitted a criticality alarm exemption request by letter dated December 4, 2009. This adequately addressed the above paragraph.

The Items a through d below are being supplemented by Items e through g until such time that an exemption from 10 CFR Part 70.24(a) has been issued by the NRC, or an accidental criticality alarm capability has been installed and approved by the NRC. A Stop Work Order will be maintained for the Process Building except to allow entry to conduct the following activities:

- a. Conduct radiological surveys and safety inspections;
- b. Conduct required environmental sampling, including sampling existing wells;

- c. Perform routine maintenance work in the building and on the roof to the extent necessary to maintain the integrity of the facility and ensure the safety of workers;
- d. If required, install an accidental criticality monitoring system;
- e. Conduct building tours (or walk arounds) for visual observation, taking photographs, measurements and/or notes, for the purpose of engineering and work scope planning for future efforts of component decontamination or removal and eventual building demolition. No Special Nuclear Material will be handled during these inspections unless from incidental or inadvertent contact which could result in minor contamination of personnel or tools, and no former process components will be removed;
- f. Conduct housekeeping, remove tools and equipment, remove waste materials, and remove soil samples, as indicated in the enclosure to this letter. The removal of Process Building piping or demolition activities is excluded; and
- g. Complete the Material Control & Accountability inventory.

This Confirmatory Action Letter will continue in effect until the NRC has confirmed that you are in compliance with your license requirements for the Process Building. This Confirmatory Action Letter may be modified pending the outcome of any additional characterization surveys of the Process Building that may be performed. Pursuant to Section 182 of the Atomic Energy Act, 42 U.S.C. 2232, you are required to notify me immediately if your understanding differs from that set forth above.

Issuance of this Confirmatory Action Letter does not preclude issuance of an order formalizing the above commitments or requiring other actions on the part of the licensee; nor does it preclude the NRC from taking enforcement action for violations of NRC requirements that may have prompted the issuance of this letter. In addition, failure to take the actions addressed in this Confirmatory Action Letter may result in enforcement action.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be made available electronically for public inspection in the NRC Public Document Room or from

E. K. Hackmann

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Sincerely,

/RA/

Mark A. Satorius
Regional Administrator

Docket No. 070-00036

License No. SNM-33

Enclosure:
As stated

cc w/encl: Hematite Distribution Service List

E. K. Hackmann

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Sincerely,

/RA/

Mark A. Satorius
Regional Administrator

Docket No. 070-00036
License No. SNM-33

Enclosure:
As stated

cc w/encl: Hematite Distribution Service List

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**Hematite List of Tools/Equipment, Waste, Materials and Soil to be Removed
from Process Buildings (no former process components included)**

January 28, 2010

Item Description	Disposition
Forklift	Decontaminate or implement controls to authorize for use in radiologically controlled areas.
Scissor lift	Decontaminate or implement controls to authorize for use in radiologically controlled areas.
Small Toyota fork lift	Decontaminate or implement controls to authorize for use in radiologically controlled areas.
Plasma torches (2)	Decontaminate or implement controls to authorize for use in radiologically controlled areas.
Sawsall (2)	Decontaminate or implement controls to authorize for use in radiologically controlled areas.
Hand tools	Decontaminate or implement controls to authorize for use in radiologically controlled areas.
159 bags of DAW consisting of used PPE, wood, rags, plastic absorbent material, damaged electrical cord, and any bags of DAW generated going forward.	Package and prepare for shipment to processing or disposal.
40 each 55 gallon drums of soil from sampling events	Package and prepare for shipment to processing or disposal.
1 drum of contaminated oil	Package and prepare for shipment to processing or disposal.
87 one cubic yard super sacks of soil cuttings from drilling, PPE, and debris from sampling events	Package and prepare for shipment to processing or disposal.
1 each 30 gallon drum containing a slightly activated beryllium shield	Package and prepare for shipment to processing or disposal.
5 each B-12 boxes soil previously used as secondary calibration standards	Add to soil volume designated for re-use, or prepare for shipment to processing or disposal.
1 each B-25 box of soil cuttings from drilling	Package and prepare for shipment to disposal.
4 pre-filters and 1 HEPA filter removed from portable ventilation units	Package and prepare for shipment to processing or disposal.
Various light bulbs, mercury vapor, fluorescent and incandescent	Decontaminate and release for disposal as universal waste.
Various batteries, AA, AAA, C, D and wet cell	Decontaminate and release for disposal as universal waste.
PCB lighting ballasts, various	Decontaminate and release for disposal as PCB waste.
Circuit Boards and telephones	Decontaminate and release for disposal as universal waste.
Pressurized spray cans, various	Puncture and dispose of as radioactive waste.
Mercury Switches	Decontaminate and release for disposal as universal waste.
Gasoline Can	Empty and dispose of as radioactive waste
Class ABC Fire Extinguishers (15)	Decontaminate and release for recertification, or dispose as radioactive waste.
Class D Fire Extinguishers (2)	Decontaminate and release for recertification, or dispose as radioactive waste.
Portable Sprayers (10)	Verify empty and dispose of as radioactive waste.
Pressure Washer	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.

**Hematite List of Tools/Equipment, Waste, Materials and Soil to be Removed
from Process Buildings (no former process components included)
January 28, 2010**

Item Description	Disposition
Portable Lights (35)	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
Hand Truck (3)	Decontaminate or implement controls to authorize for use in radiologically controlled areas.
Bradley Eye Wash Station (2)	Decontaminate and release for use or dispose as radioactive waste.
Extension Cords (25)	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
Mini Diffuser	Dispose of as radioactive waste
Shop Cart (4)	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
Calibration Weights (1 set)	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
Torque Wrench	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
Electric Pallet Jack	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
Manual Pallet Jack (2)	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
Drum Dolly (2)	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
Platform Scale	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
First Responder Kit	Decontaminate and release for use or dispose as radioactive waste.
Drill (corded)	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
Drill (cordless)	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
Flashlights (10)	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
Portable Heater	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
Portable Air Conditioner	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
Wire Shelving Unit	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
Chalkboard	Decontaminate and release for use or dispose as radioactive waste.
Gooseneck Air Sampler (3)	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
RAS Air Sampler (8)	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
HEPA vacuum (old)	Verify empty and dispose of as radioactive waste.
Lapel Samplers (6)	Decontaminate and release for use or dispose as radioactive waste.

**Hematite List of Tools/Equipment, Waste, Materials and Soil to be Removed
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January 28, 2010**

Item Description	Disposition
Old signs – misc.	Dispose of as radioactive waste.
NAMs (2)	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
HP Carts (2)	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
Lead Blankets (2)	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.
One (1) Fuel Pellet	Add to Source Inventory and place into storage in the West Vault
Step Ladder (12)	Decontaminate, authorize for use only in radiologically controlled areas, or dispose as radioactive waste.

cc: Westinghouse - Hematite Service List

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