September 3, 2013

MEETING SUMMARY

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
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SUBJECT: PUBLICLY NOTICED CONFERENCE CALL SUMMARY

On August 14, 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 and the Materials Decommissioning Branch of the Office of Federal and State Materials and Environmental Management Programs and representative of the Westinghouse Electric Company (WEC) Hematite Facility located in Festus, MO. Also participating in the call was a representative from the Missouri Department of Natural Resources. The purpose of the meeting was to discuss technical issues associated with WEC's decommissioning and remediation activities which are occurring at the Hematite facility. Enclosure 1 is the agenda for the meeting. Enclosure 2 is a listing of the conference call participants.

In the introductory remarks the NRC explained that the conference call was a Category 1 Meeting in which members of the public were invited to listen in on the call consistent with past practice, and 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 they chose to do so.

Following the introduction of the participants, the NRC discussed Westinghouse Hematite's re-survey methodology for Reuse Soil Stockpile No. 4. Enclosure 3 is a document transmitted to the NRC to facilitate the discussion of Reuse Pile No. 4.

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Following the above discussions, since no members of the public participated in the call, there was no additional discussion.

Enclosures:
1. Agenda
2. Attendee List
3. HDP Re-Survey Methodology for Stockpile 4

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FORTHCOMING PUBLIC MEETING ON WESTINGHOUSE HEMATITE DECOMMISSIONING TECHNICAL DISCUSSIONS

Agenda
Wednesday, August 14, 2013
11:00 AM – 12:00 PM

- *Introductory Remarks – NRC*
- *Topics for Discussion – Westinghouse – Soil Reuse Pile No. 4*
- *Topics for Discussion - NRC*
- *Public's Opportunity for Questions - Public*
- *Concluding Remarks – NRC*

Enclosure 1

Attendance List
August 14, 2013 Conference Call

Name	Organization	Title
Robert Orlikowski	NRC, Region III	Chief, Material Control, ISFSI and Decommissioning Branch
Mike LaFranzo	NRC, Region III	Senior Health Physicist, Material Control, ISFSI and Decommissioning Branch
Jeremy Tapp	NRC, Region III	Health Physicist, Material Control, ISFSI and Decommissioning Branch
Lionel Rodriguez	NRC, Region III	Reactor Engineer, Material Control, ISFSI and Decommissioning Branch
Kevin Davis	Westinghouse	Licensing/Environmental Manager, Hematite Decommissioning Project
Dennis Richardson	Westinghouse	Deputy Director, Hematite Decommissioning Project
Joe Guido	Westinghouse	Radiation Safety Officer, Hematite Decommissioning Project
Joe Smetanka	Westinghouse	Director, Hematite Decommissioning Project
Dinesh Sharma	Westinghouse	Project Engineering, Project Controls, Hematite Decommissioning Project
Michele DeWitt	Westinghouse	Vice President, Global Product Management & Strategy
Rock Neveau	Westinghouse	Radiation Safety Engineer, Hematite Decommissioning Project
Michelle Bresnahan	Westinghouse	Radiation Safety Engineer, Hematite Decommissioning Project
Eric Gilstrap	Missouri Department of Natural Resources	Federal Facilities Section, Hazardous Waste Program
John Clements	NRC, FSME	Health Physicist, Materials Decommissioning Branch,
Lea Parks	NRC, FSME	Performance Assessment Analyst, Performance Assessment Branch
John Hayes	Materials Decommissioning Branch, NRC, FSME	Senior Project Manager, Materials Decommissioning Branch,
Wade Adams	Oak Ridge Associated Universities (ORAU)	Project Manager/Health Physicist Independent Environmental Assessment and Verification Program of the Oak Ridge Institute for Science and Education

Enclosure 2

HDP Re-Survey Methodology for Stockpile 4

This correspondence provides the method that the Hematite Decommissioning Project will use to further characterize the soil currently designated as Stockpile 04. This stockpile is currently located in the northeast section of the Lay-down Area of the Hematite Site.

Stockpile 04 contains approximately 115,000-ft^3 of soil. The general approach to further characterize this material will be to excavate portions of the stockpile and place the excavated soil into a 6-inch lift for characterization through gamma walkover surveys (GWSs) and soil sampling (as needed, based on GWS results or as deemed necessary by Radiological Engineering). The history of characterization of the soil comprising Stockpile 04 and additional characterization details are presented below.

History of Characterization for Stockpile 04 Soils

Section 14.3.2.3 of the Hematite Decommissioning Plan describes the survey methodologies to be used when analyzing potential backfill material. Stockpile 04 followed the method described in Section 14.3.2.3.1 Survey Methodologies Utilizing HRGS. This method included gamma spectroscopy using the "box counter" with adequate sensitivity to see concentrations at or below the applicable $DCGL_W$ for the stratum where the material will be placed as backfill.

The following bullets describe the flow of material from the location where it was excavated (in-situ) till it was added to Stockpile 04:

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- Prior to excavation, a gamma scan survey of the subject area was performed.
- Material with a net count rate less than 25,000 counts per minute (ncpm) was considered potentially suitable as backfill material.
    - *NOTE: After the gamma scan survey was complete and the data collected during the scan survey was reviewed, material that was found above 25,000 ncpm was marked in the field with spray paint and/or flags. Unmarked areas indicate the material was scanned less than 25,000 ncpm and therefore available as potential backfill.*
- After excavation of waste material (marked areas), potential backfill material was excavated in 6 inch lifts or less.
- After excavation, material was stockpiled within the excavation area in a space designated as potential backfill material.
- Potential backfill material that was stockpiled within the excavation area was loaded into a container (e.g., dump truck) and then sent to the box counter for analysis.

- After the dump truck was scanned at the box counter and found to meet the criteria suitable for backfill (i.e., concentration less than the Uniform $DCGL_W$), the material was delivered to the Stockpile 04 lay down area and dumped.

- At the lay down area, each truck load of material was spread out for safety purposes, visually inspected and scanned for gamma emitting nuclides over the accessible surface. Material with a net count rate less than 25,000 counts per minute (ncpm) was considered suitable as backfill material.

    - *NOTE: If waste/debris materials were found during the visual inspection, they were removed. If material with a net count rate greater than 25,000 ncpm was found, it was removed and disposed as waste.*

- Following the gamma scan survey and visual inspection, a composite sample was collected consisting of a minimum of four aliquots selected at non-biased locations at the discretion of the HP Technician.

- Collected samples were sent to an offsite laboratory for analysis by gamma spectroscopy for Uranium, gamma emitting radionuclides and Technetium-99.

- After the visual inspection, gamma scan survey and sample collection, each truck load of material was added to Stockpile 04

Additional Characterization Method for Stockpile 04

An area will be cordoned off to support the placement of soil in an area of approximately 90-ft x 30-ft. The interstitial areas between Stockpiles 01, 03, and 04 will accommodate this operation and provide enough space (or 'Buffer") to prevent intermixing of Stockpile 04 soils with the soils associated with other stockpiles in the area. This was verified through several in-field measurements, discussions and walk downs performed by Radiological Engineering, the ECC Assistant PM and the ECC Site Supervisor.

Aerial Control of Soil Placement: Additional controls will be installed such as stakes, high-visibility construction fencing, straw waddles/silt fencing, and spotters to ensure each 6-inch lift of soil from Stockpile 04 is not mixed with the soils from adjacent stockpiles.

Vertical Control of Soil Placement: To provide a visual indication for the operator, one of the following methods will be employed:

GPS-enabled Grade Control System

Install on the track loader a GPS-enabled grade control device to provide evidence that the lift does indeed meet the survey criteria of 6 inches. The GPS-enabled grade control system will allow the equipment operator to grade with increased accuracy and at a higher rate of higher productivity.

Visual Markings and Verification

Drive stakes at approximately 10-ft intervals along the border of the 90-ft x 30-ft area. Mark the stakes with high visibility paint (or a comparable method) to provide the evidence that each lift does not exceed 6 inches. A dowel or pole will also be on hand with markings at 6-inches to allow any observer to check the thickness of specific areas of the lift.

The GPS-enabled Grade Control System is the preferred method of verification for each 6-inch lift. In the event that the system is unavailable, the alternate method of verification using stakes, dowels may be employed as a compensatory method. Utilizing either of these two options of verification (i.e., marked stakes, dowels, or the GPS grade control system) will ensure the materials are characterized to meet the DCGLs associated with re-use materials.

After the soil has been placed in a 6-inch lift (and verified by the HP Technician), a GWS will be performed. An action level of 4,000-ncpm will be used to ensure the material meets the most restrictive DCGL (Uniform) for re-use. If the lift exceeds the action level, it will be disposed of as waste. Samples will not be taken since the existing body of sampling data for Stockpile 4 is sufficient for meeting the Uniform DCGLs.

If a localized area of the lift exceeds the action level, it will be bounded and isolated for controlled removal as waste. This soil will be temporarily stored in a controlled location (see Aerial Control of Soil Placement) within the Laydown Area – most likely within the central area east of Stockpile 3 and north of Stockpile 1. Dump trucks will be scheduled to pick up this soil periodically for delivery to the Waste Holding Area to be disposed as radioactive waste.

Soils that meet the action level will be stockpiled in a new location located in the northeast corner of the Laydown Area. The track loader will be used to remove this re-use soil and transfer it to the new stockpile location.

Level of Effort

Stockpile 04 has a total volume of 115,000 ft^3. With the approximate dimensions of 90-ft x 30-ft, each 6 inch lift has a volume of 1,320-ft^3. This equates to approximately 86 – 90 lifts to remove this material. It should take approximately 4 hours to process and survey each lift of soil. The estimated duration for this activity will be 28 – 30 days, working 12-hr shifts each day.