## Westinghouse Non-Proprietary Class 3



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HEM-14-28

Date:

March 6, 2014

Subject:

Hematite Decommissioning Project: Stabilization of Site during Suspension of

Excavation Work Activities (License No. SNM-00033, Docket No. 070-00036)

The purpose of this letter is to inform the U.S. Nuclear Regulatory Commission (NRC) of measures to stabilize the Hematite Site while excavation work activities are suspended. Effective March 4, 2014, Westinghouse Electric Company LLC (Westinghouse) suspended excavation work activities pending review of the estimated budget to complete work to support license termination and possible reductions in that cost. Westinghouse expects to resume normal work activities during the week of March 17<sup>th</sup>, and will apprise NRC by telephone of changes in Site status. The resumption of work will be measured and thoughtful, involving the recall of personnel, assessments of individual work crews to ensure that personnel reporting back have adequate resources and skill mixes, and thorough assessments of conditions at each job site.

The suspension of work is not because of a safety or a compliance issue. Work activities that are not suspended are environmental monitoring, worker safety oversight, shipment of waste that has already been excavated, treatment of water in excavations, processing of re-use soil that has already been excavated, and possibly the pumping and dewatering of sanitary sludge through a filter press. Attachment 1 contains additional details on Site stabilization activities occurring during the suspension of excavation work activities. These stabilization activities and limited work activities are consistent with those employed during the two week holiday suspension of work in December 2013.

Please contact me at the number above or Dennis Richardson at 314-810-3376 should you have questions or need additional information.

Sincerely,

Gay M. Fuscell
Deputy Director

Hematite Decommissioning Project

Attachments 1) Hematite Decommissioning Project Site Stabilization Activities March 2014

cc: J. J. Hayes, NRC/FSME/DWMEP/DURLD

M. M. LaFranzo, NRC Region III/DNMS/MCID E. A. Bonano, NRC Region III/DNMS/MCID

J. W. Smetanka, Managing Director HDP

## Attachment 1 Hematite Decommissioning Project Site Stabilization Activities March 2014

The following is a description of the status of excavation work activities that are suspended, and the work activities that are continuing during the suspension of excavation work activities. The continuing work activities during this suspension provide for sufficient staff, monitoring, and oversight to keep the Site stable relative to the radioactivity present on-site. The numbers in parentheses are the nominal number of personnel conducting the work; no numbers are provided for security staff due to restrictions on that information.

## SUSPENDED WORK ACTIVITIES

- Excavation Work Areas (work suspended): The excavation work areas that have begun, but are not complete, are the North Burial Pit Area (Figure 1), the Central Burial Pit Area (Figures 2 and 3), Area Near the Railroad Loading Pad LSA-08-14 (Figures 4 and 5), the Former Process Buildings Footprint (Figures 6, 7 and 8), the Former Leach Field (Figure 9), the VOC and Tc-99 Area (Figure 10), the Area between the Site Spring and Site Pond (Figure 11). The indicated figures are photographs that provide visual indications of the status of these areas. At the time of the suspension of excavation work activities there were no contingency hot spots, either potential or confirmed, identified in the excavations or on the Site.
- Backfill Work Areas (work suspended): The South Burial Pit Area LSA-10-06, LSA-10-07 LSA-10-09, and LSA-10-10 (Figure 12) have been substantially backfilled and compacted, with the remaining backfilling to occur after backfilling adjacent areas. South Burial Pit LSA-10-05 remains to be backfilled and compacted, having heard from NRC Region III on March 3, 2014, that there were no issues with their confirmatory checks that would preclude backfill. The Barns Area LSA-05-01 (slope), LSA-05-02, and LSA-05-03 (Figures 11 and 13) are backfilled, compacted and seeded. The backfill for all of these areas came from off-site borrow locations. The backfilled areas and any potential effluents from them present no issues from a radiation safety perspective. The indicated figures are photographs that provide visual indications of the status of these areas.

## STABILIZATION AND CONTINUING WORK ACTIVITIES

- Re-use Soil Processing (4): The re-use soil that has already been excavated will continue to be processed in the Re-use Laydown Area (Figure 14). The processing involves sending the soil through the ISO-Pacific S3 Soil Sorting System (Figure 15) where soil with detected radiation exceeding an established setpoint is automatically rejected from re-use. The indicated figures are photographs that provide visual indications of the status of this area.
- Waste Shipments (4): The processing of waste that has already been excavated will continue to be processed. The volume of waste already in the Waste Holding Area (Figures 16 and 17) is expected to require multiple shipments during the suspension of excavation work activities. Personnel from Waste Management, Health Physics Technicians (HPTs), Operations and Material Control and Accounting will prepare and perform the shipments in the same manner as past shipments have been prepared and performed. The indicated figures

are photographs that provide visual indications of the status of waste being prepared for shipment.

- <u>Water Management and Treatment</u> (3-4): Water within excavations will continue to be managed and treated through the Water Treatment System (WTS).
- Monitoring Well Sampling (1): The first quarter sampling of groundwater monitoring wells is continuing to completion.
- On-site and Off-site Sample Analysis (1): The on-site Health Physics Count Room will continue to operate by qualified personnel to provide analysis results to support waste shipments, effluent monitoring, environmental monitoring, and swipe survey monitoring. In addition, preparation of samples for off-site analysis will continue. These activities include the items listed below:
  - USEI sample analysis (high purity germanium)
  - Perimeter Air Sample Analysis
  - Environmental Air Sample Analysis
  - On-site Liquid Sample Analysis (WTS Daily)
  - Tennelec Operation for routine swipe samples, rail car swipe samples
  - Sample custody, tracking, prepare and shipping of samples for shipments to USEI, samples already taken for Final Status Surveys, and quarterly samples of groundwater monitoring wells required by the Interim Groundwater Monitoring Plan
- <u>Health Physics Oversight</u> (8-9): The Radiation Safety Officer will continue normal working hours to oversee the limited operations and stability of conditions related to radioactivity. Health Physics Supervisor support will be working as needed to:
  - Complete the Semi-Annual Effluent Report required by 10 CFR 70.59, Semi-Annual ALARA Report, and the Quarterly Effluent Evaluation Report
  - Review Health Physics surveys
  - Provide dosimetry support
  - Inspect and ensure maintenance of isolation controls

HPTs will be on-site to cover the work being performed and to respond to emergent conditions. One HPT will be on-site on the weekends. The planned work to cover is:

- ISO-Pacific S3 Soil Sorting System activities
- Waste preparation and shipment
- Sampling of groundwater monitoring wells
- Survey of equipment for release from Contamination Areas, from Radioactive Material Areas, and from the Site
- Daily inspection of site boundaries, isolation controls, best management practices for surface water runoff, air and water effluent sampling equipment

- Instrument source checks and operational checks
- Water management, including WTS operation
- If the work is performed, the pumping and dewatering of sanitary sludge
- <u>Routine Radiological Surveys</u> (2): Required radiation and contamination surveys will be taken to monitoring site conditions. These include:
  - Daily surveys of active step off pads (fixed and removable contamination)
  - Weekly surveys of vehicle / equipment (fixed and removable contamination)
  - Weekly surveys of on-site Health Physics Count Room (dose rate and removable contamination)
  - Weekly surveys of Access Trailer, Cushman Room, and Frisker Shacks (removable contamination)
  - Weekly survey of Haul Roads (gamma walkover survey using a 2x2 Sodium Iodide Detector)
  - Monthly surveys of contamination areas (removable contamination)
  - Monthly surveys of non-contaminated areas (dose rate, removable and fixed contamination)
  - Monthly surveys of non-contaminated areas adjacent to Radioactive Material Areas (dose rate, removable and fixed contamination) to include parking lot and shack in the Re-use Laydown Area, and Portable Sanitary Facilities
- <u>Security</u>: Security will continue to operate in accordance with the manning requirements in the Physical Security Plan.
- Management and Supervision (13-15): The Deputy Director, Licensing Manager, Operations Manager, Health and Safety Supervision will continue normal working hours. Licensing and Environmental staff will work as needed to meet regulatory and license requirements. This bullet also includes personnel working on the Project's budget and possible cost reductions. Since Health Physics management and supervision are discussed above in the Health Physics bullet, they are not included in this bullet.
- <u>Pumping and Dewatering of Sanitary Sludge</u> (5): A possible work activity during the suspension of excavation work activities is the pumping and dewatering of sanitary sludge from the Sanitary Wastewater Treatment Plant through a filter press.

The total number of personnel working on-site during the suspension of excavation work activities is 36-45, plus security as established by the Physical Security Plan.

Figure 1. North Burial Pit Area (Central Burial Pit Area is the elevated ground in the upper right corner)



Figure 2. Central Burial Pit Area Excavation (elevated ground)





Figure 3. Central Burial Pit Area Excavation (right of yellow line is Central Burial Pit Area)







Figure 5. Excavation Near the Railroad Loading Pad LSA-08-14 (within yellow lines)

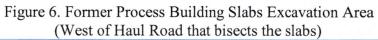
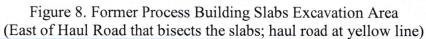
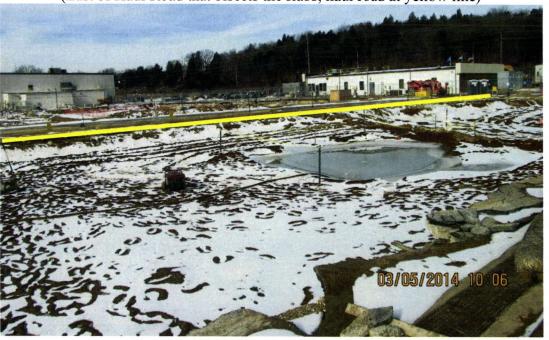






Figure 7. Former Process Building Slabs Excavation Area (West of Haul Road that bisects the slabs)







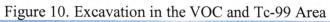




Figure 11. Excavation Area between the Site Spring and Site Pond (yellow line is the boundary between the excavation and the Backfilled Slope Area LSA-05-01)



Figure 12. South Burial Pit Backfill (within yellow lines)





Figure 13. Barns Area Backfill

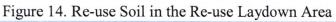






Figure 15. ISO-Pacific S3 Soil Sorting System in the Re-use Laydown Area

