

## ENCLOSURE 6 - INSPECTION RECORD

**Docket No. 070-00036**

**Licensee:** Hematite Decommissioning Project  
Westinghouse Electric Company  
3300 State Road P  
Festus, Missouri 63028

**Locations Inspected:** Festus, Missouri

**Licensee Contact:** Kenneth Pallagi, Licensing Manager

**Telephone No. 314-810-3353**

**Program Code: 21215**

**Type of Inspection:**

( ) Initial	(X) Routine	(X) Announced
( ) Special		( ) Unannounced

**Date of This Inspection:** 10.16-20.2017 with continuing NRC review through 4.3.2018

**Next Inspection Date:** NA Decommissioning Inspections, as needed.

### Summary of Findings and Actions:

- (X) No violations cited, clear U.S. Nuclear Regulatory Commission (NRC) Form 591 or regional letter issued  
( ) Non-cited violations (NCVs)  
( ) Violation(s), Form 591 issued  
( ) Violation(s), regional letter issued  
(X) Follow-up on previous violations

**Inspector(s)** Michael LaFranzo, Senior Health Physicist

M. M. L. Signature

Date 4/6/18

Approved: Michael Kungowski, Chief, MCID

Michael Kunowski Signature

Date: April 6, 2018

## PART I - LICENSE, INSPECTION, INCIDENT/EVENT AND ENFORCEMENT HISTORY

### 1. AMENDMENTS AND PROGRAM CHANGES SINCE LAST INSPECTION:

<u>AMENDMENT #</u>	<u>DATE</u>	<u>SUBJECT</u>
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None

### 2. INSPECTION AND ENFORCEMENT HISTORY:

The results of this inspection, NRC's future additional reviews of the licensee's Final Status Survey Reports and the licensee's responses have satisfied NRC's enforcement criteria at this time and, thusly, will close the below violations:

Violations	Summary
VIO 07000036/2015003-001	VIO Storm Water in LSA 02-01
VIO 07000036/2015003-002	VIO Inadequate Survey Procedures
VIO 07000036/2015003-003	VIO 100 Percent of GWS
VIO 07000036/2015002-002	VIO Survey Unit Isolation Control

The results of this inspection and NRC additional review of the licensee's Final Status Survey Reports will address NRC concerns at this time and will close the below Unresolved Items (URI):

URI's	Summary
URI 07000036/2015004-001	ALARA 10 CFR 20.1402
URI 07000036/2015004-002	Survey Unit Reclassification

### 3. INCIDENT/EVENT HISTORY:

On 8/02/2013, the licensee reported an incident to the NRC concerning the potential discovery of concentrations of radioactive material exceeding limits in an unrestricted area (NMED Item Number 130612). The NRC had reviewed the report and determined that the item did not meet the threshold of a reportable event and the item shall be closed.

## PART II - INSPECTION DOCUMENTATION

### 1. ORGANIZATION AND SCOPE OF PROGRAM:

Hematite Decommissioning Project is authorized under NRC Materials License No. SNM-00033 to perform decommissioning activities at the site located in Festus, Missouri. The site used to be a fuel fabrication facility from the 1950's to 2000. In addition to radiological surface soil and surface building contamination, the licensee was also required to remediate licensed material from burial pits. Radionuclides of concern consisted of Enriched Uranium, radium, thorium and Tc-99.

2. SCOPE OF INSPECTION:

Inspection Procedure(s) Used: 83890

Focus Areas Evaluated: 02.04; 03.03; 03.04

The inspection focused on NRC performing radiological confirmatory surveys in LSA's 10-05 and 10-14. The confirmatory survey consisted of performing core bores in pre-determined locations and taking core soil samples and performing a logging of the core bore hole with a sensitive radiation detector. The licensee also took soil samples from the core which were analyzed for radiological and chemical content. Results are provided in Part II, Section 3 of this report.

3. INDEPENDENT AND CONFIRMATORY MEASUREMENTS:

On October 16-20, 2017, the NRC, with ORAU as the independent contractor, conducted core bore sampling within LSA's 10-05 and 10-14. The core bore process consisted of using a push core bore machine which allowed soil sampling at the appropriate depths once the soil was extracted. The soil sample was then sent to an independent laboratory and analyzed for radiological content.

Prior to abandoning the hole, which consisted of back-filling with an appropriate material, a sensitive radiation detector was lowered into the hole and slowly extracted taking radiation measurements along the way.

ORAU's Report titled "The Independent Confirmatory Survey Report for the Subsurface Investigations and Sampling of Survey Units LSA 10-05 and LSA 10-14 at the Hematite Decommissioning Project; Festus, Missouri" can be found within NRC's electronic database (ADAMS)(ML18024A876).

The licensee obtained soil samples from the core bores at the same time as ORAU personnel, but were not the same sample. The results of the licensee's analysis can be found in ADAMS (ML18086A494).

The NRC reviewed the data from ORAU and the licensee and found that radiological contamination levels did not appear to exceed the licensee's DCGL's.

In Part II, Section 2 of this report is a list of four violations and two URI that had been identified in previous inspections. The results of the confirmatory survey by NRC provide evidence that residual contamination that may have been transported via water from adjacent LSA's for potential inadequate surveys may not have significantly impacted the licensee's ability to release the site for unrestricted use. The NRC is continuing to review the licensee's Final Status Survey Reports and will use these confirmatory survey results to assist in its determination whether the site can be released for unrestricted use.

4. VIOLATIONS, NCVs, AND OTHER SAFETY ISSUES:

No violations of NRC requirements were identified.

5. PARIAL LIST OF PERSONNEL CONTACTED:

- # Kenneth Pallagi – Licensing Manager
- # Clark Evers – Radiation Safety Officer
- # Attended exit meeting on April 3, 2018.

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