



Westinghouse Electric Company LLC
Hematite Decommissioning Project
3300 State Road P
Festus, MO 63028
USA

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Direct tel: 314-810-3368
Direct fax: 636-937-6380
e-mail: CoppRD@Westinghouse.com
Our ref: HEM-12-17
Date: February 13, 2012

Subject: REPLY TO A NOTICE OF VIOLATION ISSUED JANUARY 20, 2012, WELL
LOCKING (LICENSE NO. SNM-00033, DOCKET NO. 070-00036)

Reference 1: NRC (C. A. Lipa) letter to Westinghouse (R. D. Copp), dated January 20, 2012, "NRC
Inspection Report 07000036/11-002(DNMS) and Notice of Violation - Westinghouse
Electric Company (Hematite)"

Pursuant to the provisions of 10 CFR 2.201 and Reference (1), this letter submits the Westinghouse
Electric Company LLC (Westinghouse) reply to a Notice of Violation that was transmitted by
Reference 1.

Westinghouse accepts the violation, takes this issue seriously, and initiated corrective actions upon the
issue being identified during the inspection. The attachment to this letter provides the reply to the violation
in the format specified in the Notice of Violation.

Please contact Kevin Davis of my staff at 314-810-3348 should you have questions or need any additional
information.

Respectfully:

A handwritten signature in black ink, appearing to read "Robert D. Copp".

Robert D. Copp
Director, Hematite Decommissioning Project

Attachment: Westinghouse Response to Notice of Violation Issued by NRC on January 20, 2012, on
Well Locking

cc: C. D. Pederson, NRC Region III
A. T. Boland, NRC Region III/DNMS
P. Michalak, NRC/FSME/DWMEP/DURLD/MD
J. J. Hayes, NRC/FSME/DWMEP/DURLD/MD
A. T. McCraw, NRC Region III/DNMS/MIB
M. M. LaFranzo, NRC Region III/DNMS/MCID
J. W. Smetanka, Westinghouse

WESTINGHOUSE RESPONSE TO NOTICE OF VIOLATION ISSUED BY NRC ON JANUARY 20, 2012, ON WELL LOCKING

VIOLATION

During the U.S. Nuclear Regulatory Commission (NRC) site inspections conducted on November 1 - 4, 2011, and November 28 - December 2, 2011, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

Condition 16 of License SNM-33, Amendment 56 dated December 29, 2010, states that the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in application dated October 5, 2004. This Amendment was effective until October 13, 2011.

Section 6 of Application dated October 5, 2004 states, in part, that effluent samples are collected in accordance with site procedures.

Condition 16 of License SNM-33, Amendment 57 dated October 13, 2011, and Amendment 58 dated October 27, 2011, states, in part, that the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in Documents identified in Chapter 1 of NRC Decommissioning Plan Safety Evaluation Report (SER) (M1112101630).

Section 1.1 of the Documents identified in Chapter 1 of NRC Decommissioning Plan SER (M1112101630), titled Background, states, in part, that Westinghouse submitted an Effluent and Environmental Monitoring Plan (ML110330371) in support of the Decommissioning Plan.

Section 8.7 of the Effluent and Environmental Monitoring Plan (ML110330371) in support of the Decommissioning Plan states, in part, that effluent samples are collected and analyzed in accordance with site procedures.

Section 8.2.7 of Effluent Monitoring Procedure HDP-PR-EM-011, Rev. 1, "Low Flow Well Sampling," effective December 4, 2009, and Rev. 2, effective October 27, 2011, states, in part, that "upon completion of sampling, disconnect the flexible tubing, remove non-dedicated sampling tubing, if used, and close and lock well cap."

Contrary to the above, on November 1, 2011, the licensee tested the locking mechanism for wells BD-02, BD-03, BD-04, BD-06, BD-08, LF-09, NB-54 and NB-57A and identified that the well caps were not locked. Additionally, these well caps had not been locked for the ten month period preceding November 1, 2011.

This is a Severity Level IV violation (Section 6.3).

Westinghouse accepts this violation.

1 REASON FOR THE VIOLATION

Westinghouse has conducted a root cause analysis of this failure to lock the flush mount wells as described in the procedure for well sampling. Monitoring wells BD-

02, BD-03, BD-04, BD-06, BD-08, LF-09, NB-54 and NB-57A have surface structure that is flush to the ground surface (“flush mount”). These flush mount wells do not have the space for a traditional padlock used on wells that have above ground structure (“standpipe”).

The procedure for sampling monitoring wells had the same instruction for ‘locking’ both types of wells, even though the two well types required different steps. This difference in steps was rationalized and allowed to exist due to insufficient understanding of verbatim compliance. In addition, rubber components of the flush mount well caps for both the well riser and the flush mount assembly had degraded and they no longer performed as intended.

The root cause analysis has identified the following causes:

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| Root Causes | Lack of understanding of verbatim compliance. An understanding of verbatim compliance would have prevented the rationalization that occurred when the work step to “close and lock well cap” was attempted and when supervisory and quality assurance oversight was involved with this procedure. |
| | No requirements exist at HDP for field validation of work steps or associated training modules when a procedure is created or changed. Field validation of work steps when creating or revising procedural work steps would have identified that the flush mount wells required different work steps from the standpipe wells for locking. |
| | HDP does not have a Preventative Maintenance program for well components. A preventative maintenance program for well components would have prevented the failure of the rubber components to effectively “lock” the well cap in place. |
| | Form utilized for peer observations has a limited scope focused on safety and not verbatim adherence to procedure compliance. The work oversight forms used by Operations, Health Physics, and Environmental Health and Safety staffs did not remind the observers to assess verbatim compliance as part of the safety evaluation. If these forms had contained such a reminder, the increased attention may have identified the issue with the step to “close and lock well cap.” |
| Contributing Causes | HDP Management did not adhere to Procedure HDP-PR-GM-022 in conducting Human Performance Management Observations due to inadequate project resources. Management time spent with the workforce promoting and coaching work would have helped understanding of verbatim compliance, and the increased attention may have identified the issue with the step to “close and lock well cap.” |
| | HDP project resources are inadequate. Several managers are acting in many roles that are in addition to their regular roles for which they were hired, and that some have been in an acting role for |
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| | well over a year's time. The overextended management staff bypassed the requirements of performing management observation per HDP-PR-GM-022 due to other observations/oversight being performed at the site. However, as discussed above, other observations/oversight programs were not effective in evaluating procedural adherence. If additional management staff had been available, management would have had time to perform the intended observations, and the increased attention may have identified the issue with the step to "close and lock well cap." |
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2 CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED

The caps on the flush mount wells have been replaced with new caps that have been tested to perform as intended. The monitoring well procedures were revised to provide work steps specific to flush mount wells and to standpipe wells with respect to locking. These actions were completed on November 18, 2011.

The results achieved are that the specific problem areas identified in the notice of violation have been corrected. As stated in Reference (1), "on November 30, 2011, the inspectors verified that the licensee had installed new locking mechanisms and that the mechanisms were functioning as appropriate. The inspectors interviewed several technicians and determined that each had adequate knowledge and equipment to lock the wells in accordance with the procedure."

| Corrective Actions for the Violation | Due Date |
|---|---------------------------|
| Replace well caps and plugs on flush mount wells BD-02, BD-03, BD-04, BD-06, BD-08, NB-57A, NB-54, and LF-09. | Complete Nov. 18, 2011 |
| Review and update Procedure HDP-PR-EM-011 'Low Flow Well Sampling' to verify that it clearly states how to unlock above ground and flush mount wells and how to lock the same once sample has been collected. Refer to Corrective Actions Process (CAPs) Commitment 11-307-W004.02. | Complete Nov. 18, 2011 |
| Review and update Procedure HDP-PR-EM-017 'Groundwater Monitoring Well Leachate Collection' to verify that it clearly states how to unlock above ground and flush mount wells and how to lock the same once sample has been collected. Refer to CAPs Commitment 11-307-W004.03. | Complete Nov. 18, 2011 |
| Incorporate the changes to HDP-PR-EM-011 and HDP-PR-EM-017 into Practical Evaluation and On-the-Job Training Guide – Environmental Radiological Sample Training EHS-DS-ERSAMP with regard to opening and securing above ground and flush mount wells during sampling collection. Refer to CAPs Commitment 11-307-W004.05. | Complete Nov. 18, 2011 |

3 CORRECTIVE STEPS THAT WILL BE TAKEN

Section 2 above contains all of the corrective actions specific to the violation, and those actions are complete.

In addition, Westinghouse's analysis has identified corrective actions that will be applied to address underlying factors. The following corrective actions have been or will be

taken to address the underlying factors listed in Section 1 above for root and contributing causes.

| Corrective Actions for Underlying Factors | Due Date |
|--|---|
| Administer training to all previously trained personnel on Environmental Radiological Sample Training EM-DS-ERSAMP Rev. 2 as modified per CAPs commitment 11-307-W004.05. Refer to CAPs Commitment 11-307-W004.08. | Complete Dec. 2, 2011 |
| Held an all hands meeting to discuss the failure to follow a procedural work step for well locking, including the importance of verbatim compliance in preventing such events. | Complete Dec. 8, 2011 |
| Conduct site-wide training on expectations for verbatim compliance to procedures. | Due: Feb. 14, 2012 |
| Update Human Performance Programs to include activities that reinforce verbatim compliance expectations to entire HDP staff and contractors on a routine basis. | Due: Jul. 18, 2012 Target to complete at same time as next action: Apr. 10, 2012 |
| Revise HDP-PR-GM-022 to require all HDP departments to perform and submit Human Performance Management Observations to Human Performance Lead on a weekly basis. Procedure will also require observations be reported to the site management team for review and action on no less than a bi-weekly (every 2 weeks) timeframe in a face-to-face meeting. | Due: Apr. 10, 2012 |
| Corporate Human Performance management will also provide Human Performance tools, observation cards, and training as requested by the HDP site to ensure compliance and a proactive approach to preventing human performance issues. | Due: Mar. 22, 2012 |
| Distribute Human Performance handbooks and memory cards to all HDP staff. | Due: Apr. 10, 2012 |
| Project Director shall perform an on-site assessment of HDP project resources and determine which resources are needed. Once identified, the Project Director will create a commitment to obtain these resources. | Due: Mar. 8, 2012 |
| Revise procedure and the associated oversight forms in HDP-PR-GM-012 to include an evaluation of verbatim procedural compliance with the work activity being performed. | Due: Mar. 7, 2012 |
| Revise the well sampling and leachate collection procedures (i.e., HDP-PR-EM-011 and HDP-PR-EM-017) to include an inspection of the well components during well sampling and leachate collection activities. Include a list of specific well components that should be checked for degradation during the well sampling and leachate collection activities. Add a checklist to the sampling/leachate collection forms to ensure these well components are checked during these activities and are used as a reporting mechanism for any adverse situations. Mark changes as Corrective Actions to Prevent Recurrence (CATPRs) in accordance with WEC 16.2, including those that have already been completed per 11-307-W004.02 and 11-307-W004.03. | Due: Mar. 14, 2012 |

| Corrective Actions for Underlying Factors | Due Date |
|---|---------------------------|
| Update training module EHS-DS-ERSAMP to include performing sampling activities verbatim in a step-by-step manner in the field (hands-on) using the applicable procedure. Module shall also cover what protocol to follow should a discrepancy be found in either the procedure or the process where verbatim compliance cannot be sustained. Train all technicians assigned to well sampling on the updated training module. Mark changes as CATPRs in accordance with WEC 16.2, including those that have already been completed per 11-307-W004.05. | Due: Mar. 28, 2012 |
| Revise HDP-PR-GM-009, Requesting Procurements, to ensure that any new equipment purchased implements a Preventative Maintenance program if applicable. Mark procedure as a CATPR in accordance with WEC 16.2. | Due: Apr. 24, 2012 |
| Review all types of equipment that may exist at the HDP site that may require preventive maintenance to ensure performance and adherence to regulatory requirements. If any equipment requiring Preventive Maintenance is identified that is not already addressed in a procedure, create a commitment to revise any applicable procedures to ensure equipment gets added to the Preventive Maintenance program. | Due: Mar. 22, 2012 |
| Revise HDP-PR-GM-010 Rev. 11 Document Requirements to include validating new and revised procedures to include step-by-step confirmation by field personnel that work can be performed as specified. Mark changes in HDP-PR-GM-010 as CATPRs in accordance with WEC 16.2. | Due: Mar. 7, 2012 |
| Develop plan to identify all procedures/work packages that need to be validated by field personnel. Upon completion of plan development, create commitments to validate all procedures identified in plan. | Due: Apr. 5, 2012 |
| Review Commitment 11-307-W004.04 to determine if action taken to close commitment was adequate to meet the intent of the commitment. | Complete Jan. 25, 2012 |
| Note: The following six entries are based on initial reviews of compliance with MDNR regulations for monitoring wells. The initial reviews resulted in reconfiguration of identified wells that needed to meet MDNR regulations for being in flood prone areas and repair to two flush mount well assemblies so surface water would not enter. | |
| Perform a comprehensive review of operational (not abandoned) wells to determine if they are in compliance with Missouri Department of Natural Resources (MDNR) regulations 10 CSR 23-4.020 and 10 CSR 23-4.060. | Due: Mar. 7, 2012 |
| Review all above ground wells in the identified flood prone regions of the site and replace any riser plugs that are not configured to maintain a watertight seal with a new plug configuration identified that will seal and also manage the dedicated tubing requirement for the Interim Groundwater Monitoring Plan (IGMP) protocol. Refer to IR 11-356-W001. | Due: Mar. 7, 2012 |
| Locate monitoring well records and place in electronic records organized by well number. These records should include MDNR Well Certification Record Forms, MDNR issued well certification numbers, well boring logs, and any other supporting documents. | Due: Mar. 7, 2012 |
| Ensure Procedure EO-06-003 references and incorporates the appropriate regulatory MDNR standards. Refer to CAPs Commitment 11-307-W004.06. | Due: Jun. 6, 2012 |

| Corrective Actions for Underlying Factors | Due Date |
|---|---|
| Add a comment to 11-307-W004.04 to clarify the task was for locking provisions of MDNR well regulations and that further evaluation for other regulations is in 11-307-W004.07. | Due: Feb. 16, 2012 |
| Add comment to 11-307-W004.07 to clarify that IR 11-356-W001 contains resolution of issues related to flood prone areas. | Due: Feb. 16, 2012 |
| Perform a final effectiveness review. The corrective action plan will be considered effective if all of the following criteria are met: <ul style="list-style-type: none">- Actions successfully prevented a consequential recurrence of the event, as indicated by the absence of Medium or High Significant CAPs Issues identical in nature to this event.- CATPRs were implemented in a manner that satisfied their intent, unless otherwise approved by the Corrective Action Review Board Chairperson.- Implemented CATPRs were verified still in place at the time of the Effectiveness Review, unless otherwise approved by the Corrective Action Review Board Chairperson.- The CATPRs worked as intended when challenged to prevent recurrence.- Changes made to any documents to implement a CATPR are clearly denoted as CATPR-related per WEC 16.2, in order to prevent their inadvertent deletion. In cases where an entirely new document is created in response to a CATPR, the intent of this provision can be met by applying the CATPR flag only on key provisions of the document that are actually establishing the needed defense. | Kickoff by: Feb. 10, 2013 Complete by: Feb. 25, 2013 Target to complete by: Oct. 26, 2012 |

4 DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

As described in Section 2 above, full compliance with respect to the specific issues in the violation was achieved on November 18, 2011.

As noted in Section 3 above, HDP is continuing to take corrective actions that will be applied to address underlying factors.