STATE OF MISSOURI Matt Blunt, Governor • Michael D. Wells, Acting Director
DEPARTMENT OF NATURAL RESOURCES
www.dnr.mo.gov

Post Letter: 70-36

January 18, 2005

Mr. Henry A. Sepp
Site Manager
Westinghouse Electric Company LLC
3300 State Road P
Festus, MO 63028

RE: *Engineering Evaluation and Cost Analysis for Removal Action on Buildings and Equipment at the Westinghouse Former Fuel Cycle Facility Site Festus Missouri,* September 2004, and *Environmental Report for Building Demolition at the Hematite Facility*

Dear Mr. Sepp:

The Missouri Department of Natural Resources has reviewed *the Engineering Evaluation and Cost Analysis for Removal Action on Buildings and Equipment at the Westinghouse Former Fuel Cycle Facility Site, Festus Missouri,* September 2004 (EE/CA,) and the *Environmental Report for Building Demolition at the Hematite Facility* (ER.) The EE/CA evaluates three alternatives for managing contaminated buildings at the Hematite facility and is supplemented by information in the ER. The department agrees with and supports the selection of Alternative 3, Equipment Removal and Building Demolition, as the option that most closely meets the identified objectives including protection of human health and the environment and cost control.

The department has identified several issues that require clarification or revision before this removal action can be implemented. Specific comments on each document are attached, however, two of the more important issues we identified are discussed here. First, the EE/CA seems to focus only on potential radiological impacts of the proposed action. The ER rightly identifies non-radiological hazardous and non-hazardous substances and wastes that will be encountered during the removal action. These should be addressed in the EE/CA and corresponding Applicable or Relevant and Appropriate Requirements (ARARs), including applicable federal and state statutes, regulations, and guidance should be added. Second, the methods proposed to control and monitor water discharges and fugitive dust emissions are not explained in sufficient detail to allow the department to properly assess their adequacy. As these pathways have the greatest potential to result in releases to the surrounding community they must be carefully considered and sufficiently detailed to assure that any impacts will be below levels of potential concern.

We request a written response to each of the enclosed comments within 30 days of your receipt of this letter. If you have any questions please contact me at (314) 877-3252, or by mail to 917 N. Highway 67, Suite 104, Florissant, Missouri 63031.

Sincerely,

HAZARDOUS WASTE PROGRAM

Ben D. Moore, P.E.
Senior Project Manager

BM:dd

c: Mr. Scott Clardy, Department of Health and Senior Services
Mr. Dennis Deihl, Jefferson County Health Department
Mr. Amir Kouhestani, U.S. Nuclear Regulatory Commission
Mr. Pat Lamping, Jefferson County Commission
Mr. Mark Mertens, Jefferson County Commission

Missouri Department of Natural Resources Comments
Westinghouse Electric Company Hematite Facility
Engineering Evaluation and Cost Analysis for Removal Action on Buildings and Equipment at the Westinghouse Former Fuel Cycle Facility Site

General Comments

The September 2004 *Engineering Evaluation and Cost Analysis for Removal Action on Buildings and Equipment at the Westinghouse Former Fuel Cycle Facility Site Festus Missouri* (EE/CA) was not submitted to the department for formal review. It was posted in the public library in Festus, Missouri and a notice was sent to various stakeholders indicating a public review period had started. Subsequent to that initial notice Westinghouse (WEC) informally provided the department with electronic "pdf" documents of the EE/CA and the supporting *Environmental Report for Building Demolition at the Hematite Facility* (ER). The comments included with this letter are based on our review of the informal electronic document submittal.

The EE/CA focuses on potential radiological releases only and does not appear to address or acknowledge the presence or potential presence of other hazardous materials or wastes. The department agrees with WEC that radiological contaminants are hazardous materials subject to regulation under CERCLA, as are other contaminants of concern at the site. Other hazardous materials including industrial solvents and asbestos are know to be present at the site as contaminants, building materials, or stockpiled equipment or waste residue. Mixed waste, consisting of radioactively contaminated hazardous materials, are also expected to be present on-site. Radiological contaminants may well represent the primary hazard associated with the proposed removal action; nevertheless, other hazardous materials at the site must be included as details of the proposed action are developed. The EE/CA document should be revised to take these materials into account and corresponding ARARs must be identified for appropriate project management.

The department agrees that a removal action is an appropriate CERCLA approach for the described activities and that Alternative 1, No Action with Engineering Controls, does not meet objectives of long-term protection of human health and the environment. The EE/CA does not contain sufficient information to allow the department to assess the merits of the cost estimates presented in Table 5-1 for Alternatives 2 and 3. However, considering the significant cost differential identified between Alternatives 2 and Alternative 3 ($18,009,000 vs $8,201,000) it is surmised that the details of cost estimates developed by WEC would clearly favor Alternative 3, Equipment Removal and Building Demolition.

The EE/CA proposes activities that will result in a significant potential for contaminant dispersion and migration through air and water pathways, possibly resulting in worker exposure or off-site contaminant releases. Plans to be implemented to control dust emissions and water run-off must be submitted to the department for review and comment prior to implementing the EE/CA. Appropriate monitoring plans designed to provide data that will document compliance with the control plans must be developed and submitted to the department for review and comment prior to implementing the EE/CA

An action memorandum should be developed for this EE/CA.

The department has designated the following individuals as its Project Coordinators during review and implementation of the EE/CA.

Ben Moore
Project Manager
MDNR, Federal Facilities Section
917 N. Highway 67, Suite 104,
Florissant, Missouri 63031.

Julicann Warren
Project Quality Assurance Officer
MDNR, Superfund Section
P. O. Box 176
Jefferson City, Missouri 65102

Westinghouse shall direct all submissions responsive to the comments on the EE/CA or ER to each Project Coordinator at the address indicated. All documents provided to the department for review must be submitted no less than 90-days prior to implementation of the EE/CA. Submissions shall be provided as paper copies accompanied by electronic versions (e.g. MS Word or Adobe "pdf" files) of the paper document. A second paper copy shall be provided to Mr. Moore for retention as the department's official file copy. An appropriate cover letter shall accompany each submission.

Specific Comments

Table 2-3 Soil Samples Underneath Site Buildings

There are a number of blank boxes in this table and it is not clear if the blanks represent reported data that is less than detection limits or the absence of data for that analyte. Also, explanatory text in Section 2.4.2, Soil Beneath Buildings, infers that non-radiological analytes were evaluated, however, there is no corresponding data. Please clarify and add the additional analytical data to the table.

3.5 Applicable or Relevant and Appropriate Requirements

The department has advised WEC on several occasions that they should formally request that the state provide a list of Applicable or Relevant and Appropriate Requirements (ARARs) for any removal or remedial activities at the Hematite Radioactive Site. WEC has yet to make such a request and the EE/CA reflects this as the ARARs list included in Table 3-1 is incomplete. A draft EE/CA with a draft list of ARARs should have been submitted for department review and approval prior to public comment. We now formally request that WEC submit an ARAR determination request letter to the department prior to moving ahead with the EE/CA. The request should describe currently known conditions at the site and the activities WEC plans to take or may reasonably take in response these conditions. This request should be made no later than February 17, 2004

Missouri Department of Natural Resources Comments
Westinghouse Electric Company Hematite Facility
Environmental Report for Building Demolition at the Hematite Facility

General Comment

The *Environmental Report for Building Demolition at the Hematite Facility* (ER) is presented as a supplemental document to the September 2004 *Engineering Evaluation and Cost Analysis for Removal Action on Buildings and Equipment at the Westinghouse Former Fuel Cycle Facility Site, Festus Missouri* (EE/CA.) The ER identifies many of the issues to be considered, including procedures or techniques to be implemented during the proposed building demolition at the Hematite Radioactive Site. It is, however, lacking in information sufficiently specific to provide the detail necessary for the department to assess whether the proposed activities would indeed meet the identified objectives. Various plans to be developed in the future are referenced as if an agreement has already been established and that they would be sufficient to meet the performance objectives.

The ER identifies many different types of materials and wastes that will be encountered during building demolition and equipment removal. A general listing includes: non-hazardous liquid and solid wastes; liquid and solid substances or wastes that are also hazardous substances due to radionuclide contamination; liquid and solid substances or wastes that are hazardous due to non-radioactive chemical contamination; and mixed wastes that are a mixture of a radioactive contaminants and hazardous chemical waste materials. The EE/CA addresses only radioactive materials expected to be encountered during equipment removal and building demolition. The department agrees with the ER assessment that a variety of hazardous substances and wastes will be encountered during this removal action and asserts that the EE/CA must be revised to address this expectation.

The ER often restates or paraphrases various criteria included with more specificity in applicable statutes or regulations. In these cases the statute or regulation is the overriding criteria to be followed. This report should make this clear.

Specific Comments

1.2 The Proposed Action, Paragraph 4
This identifies the facility State Operating Permit (NPDES Permit) number MO-0000761 as regulating surface runoff during building demolition. However, the department has not been asked to evaluate the proposed action relative to the permit criteria and has not previously approved the control of runoff from building demolition as a permitted discharge. It also appears that some areas that may be impacted by building demolition runoff will not necessarily discharge to a permitted and monitored outfall. This paragraph also states that "soil erosion and sedimentation will be controlled in accordance with applicable state requirements and guidance" but there is no specific reference to either in the ER or in the EE/CA ARARs list. Please provide specific references and add to the EE/CA list.

1.3 Applicable Regulatory Requirements, Permits, and Required Consultations
This short paragraph does little to clarify the issues indicated in the section heading. The referenced EE/CA Section 3.5, while more extensive, is limited primarily to radionuclide contamination as previously noted.

3.4.1 Surface Water Discharge
As noted in the comment on **1.2 The Proposed Action**, Paragraph 4, the State Operating Permit does not currently address all discharges from the contemplated activities.

3.6.2 Air Quality.
Paragraph 2: The meaning or intent of the statement "historical environmental monitoring data will be used as a standard for demolition activities" is not clear. Please clarify.

Paragraph 4 States: "During plant operations, environmental air emissions were monitored from 19 stacks." It is our understanding that there were more than 90 stacks at the plant during at least a part of the operating history. We assume the referenced 19 stacks are related to recent operation and that the additional stacks were monitored as well, when they were active. Please clarify.

3.12 Waste Management
Paragraph 3: This implies that prior to 1974 all waste materials were disposed of in on-site burial pits. This was not the case as there were surface water discharges and a leach field that allowed wastewater to seep into groundwater. There are also two known "evaporation ponds" that have been historically used for disposal of radioactive and hazardous waste materials.

3.1.2 Liquid Waste
This section includes a discussion of radioactive liquid waste management, however, a discussion of chemically contaminated waste liquids are notably absent. The section should include a discussion of chemical waste management practices.

3.1.2 Solid Wastes, Red Room, Item Plant and Related Areas
States that the "red room" roof was buried outside the "ten-acre central tract." The ER refers to this "central tract" several times but there is no map showing the boundaries. Please identify this tract and the outside location where the Red Room roof is buried, if that is known.

4.3 Geology and Soils Impacts
The first two bulleted items list examples of the bare minimum of actions that should be considered to minimize the impacts to surrounding soils. The third bulleted item is inappropriate as "reasonable attempts" to control run-on is indefinite and insufficient. Run-on can and should be prevented.

4.6 Air Quality Impacts
Fugitive dust emissions are expected to pose the greatest potential for impacting the surrounding community. A clearly thought out and well-detailed plan to control and monitor this important exposure pathway must be completed before the removal action is implemented. The plan must be submitted to the department for review and comment at least 90 days prior to the start of building demolition.

Paragraph 1: The department has not reviewed data, calculations, factual information, or work plans that would support the statements that "Emissions resulting from implementation of the Proposed Action are not anticipated to approach the emission levels observed during operation of the facility." Please provide clarifying technical justification for this statement.

4.6.1 Mitigation Measures

Paragraph 1: Please describe conditions that would lead to a determination that a "lock down agent" would be "necessary" to seal residual contamination prior to building demolition.

Paragraph 2: The department cannot accurately assess the adequacy of using water to control dust during building demolition until a specific work plan has been developed for this action. It is also important to note that wind, or lack of wind could also impact the timing of building demolition decisions. There is no indication of what actions will be taken to prevent wind-blown contaminant dispersion after the work shift has ended. Nor is there indication that consideration has been given to how wind-blown contaminant dispersion will be prevented after structure(s) have been demolished but before waste materials have been characterized and properly packed for shipment. There is also no plan indicated for controlling fugitive dust emissions during material "sizing" stockpiling or loading operations. These and any other pertinent activities must be clearly identified in a detailed fugitive dust control plan that includes more than the simple act of spraying water on the buildings and surrounding area during the demolition work shift.

4.6.2 Monitoring

A detailed monitoring plan must be completed and before demolition activities can commence.

4.11.3 Mitigation Measures

Paragraphs 2 & 3: As previously noted, a detailed monitoring plan must be developed and submitted to the department for review and comment prior to implementing the EE/CA. The radiological monitoring plan conducted under the NRC license may meet this criteria for radiological contaminants, however, other potential non-radiological contaminants (asbestos, particulates, etc) should be included in monitoring considerations.

Paragraph 6: Necessary permits should be identified in the ER

4.12 Waste Management Impacts

Paragraph 2: RCRA and TSCA wastes are identified as potential materials expected to be encountered during building demolition. Corresponding state and federal regulations should be identified as ARARs in the EE/CA

4.12.2 Clean Debris

Radiologically contaminated "clean debris" from this site may not be disposed of in a landfill in the state of Missouri.