

Comment: Westinghouse has provided insufficient information on the ways by which they will prevent spread of radioactive contamination during the interval between demolition and transfer of building debris.

Basis: In response dated August 12, 2010 to the RAIs regarding Hematite request for Amendment 52, it is stated that “Westinghouse plan to proceed directly from building demolition to waste packaging for transfer to processing and/or disposal”. This statement appears to be contrary to what WEC indicated in Section 5.1.3 of HDP-TBD-HP-504, Assessment of Conditions During Process Building Demolition which was provided with March 22, 2010 submittal. In that document it is stated that “covering stockpiled materials or laydown area with plastic sheeting or traps during any extended period of inactivity. It is not clear what an “extended period of inactivity” is. It is also not clear how Westinghouse will prevent spread of contamination due to water runoff resulting from an unexpected heavy rain without installing any barriers around the building demolition area. In addition, what if there is a gap between the time that the buildings are demolished and approval is received to ship the material to U. S. Ecology or any other facility.

Path Forward: Please address the conflicting statements regarding the duration between building demolition and waste packaging for transfer. Please describe how Westinghouse will prevent spread of radioactive contamination due to water runoff from unexpected heavy rain or if there is a time lag between approval of the 20.2002 and the demolition of the buildings.

Westinghouse Response:

Westinghouse recognizes three issues associated with this RAI. Explanations of these issues are provided below.

A. Conflicting Statements Regarding Duration Between Building Demolition and Waste Packaging:

Westinghouse agrees that the information in the two references is not identical, but in the context which the information is presented, the statements are not conflicting. Westinghouse offers the following as clarification.

The response to the RAI of August 12, 2010 was intended to support the position that nuclear criticality safety was assured in the context of the question that assumed storage would occur. The entire paragraph of that response (with emphasis added herein) indicated the following:

“With regard to characterization to facilitate storage, the information obtained from the characterization plan implemented in 2009 provided the basis to conclude that controls for nuclear criticality safety are not required for storage. *However, in general,* Westinghouse plans to proceed directly from building demolition to waste packaging for transfer to processing and/or disposal. Material handling, staging and packaging will be performed within properly posted and controlled areas.”

As indicated in the August 12, 2010 response to RAIs, Westinghouse intends to load the majority of the building demolition waste directly into containers for transport to the waste processing facility. This approach is considered most appropriate since it minimizes the handling and hazards.

The statement in HDP-TBD-HP-504, Assessment of Conditions During Process Building Demolition, describes the controls that will be imposed during "any extended period of inactivity". It does not indicate that there will be an extended period of inactivity, but only what would be imposed if such a period were to occur. Note that the actual duration of the period of an extended period of inactivity is not defined. This is with intent since the actual duration is not as important as the radiological characteristics of the waste. For example, it would be more critical to immediately cover waste having greater levels of transferable surface contamination than it would be to cover this demolition waste. This is true since this waste has been coated with a fixative and shown by characterization surveys to have little transferable surface contamination.

The practice of covering waste that is referenced in HDP-TBD-HP-504, Section 5.1.3, Other Engineering Controls (a subsection of Section 5.0, Measures to Mitigate Potential Adverse Effects) is intended to account for atypical circumstances. For example, a limited amount of demolition waste (e.g., HEPA filter housings) is believed to exceed the waste acceptance criteria for radioactivity at the selected processing facility. This waste will become more readily accessible for removal only after portions of the building are demolished, and thus it will be removed as demolition progresses. The period of inactivity in this example would be the period of time from when this waste is placed into a covered stockpile (provided that a container is not at-hand as planned) until an adequate amount of waste has been accumulated to comprise a shipment to the alternate disposal facility. It is also possible that covering unpackaged waste may be necessary for other reasons that cannot be predicted (e.g., extreme weather, or equipment breakdown). In any case, the waste will be stored in a contaminated area, and any surface water run-off controlled as described below.

B. How Westinghouse Will Prevent Spread of Radioactive Contamination Due to Water Runoff from Unexpected Heavy Rain:

Surface water run-off resulting from precipitation will be collected to prevent the spread of contamination to non-contaminated areas. The perimeter of contaminated areas will be sloped inward or curbed to contain and direct potentially contaminated surface water to sumps or other low-lying areas that will be used as collection points within the contaminated area. From there, the water will be pumped to a holding tank for sampling and/or treatment and discharge.

In anticipation of Decommissioning Plan approval, Westinghouse has installed a large capacity water treatment system, which will be operable for building demolition. The water treatment system has a capacity equivalent to the amount of precipitation that could be expected during a 25-year rainfall event, which provides a very conservative safety basis for environmental protection. To reduce the amount of surface water run-on into contaminated areas (which would create additional water requiring collection and processing) diversion features (e.g., curbs) will be constructed at up gradient locations to direct precipitation around contaminated areas.

C. Time Lag Between Approval of 20.2002 and Demolition of the Building:

Westinghouse will not begin the building demolition prior to finalizing contracts with a duly authorized waste processing and/or disposal facility. Therefore, Westinghouse

does not intend to store building debris for an extended period of time or to delay waste shipment.

As clarification, Westinghouse has not connected the licensing action for building demolition with the request for alternate waste disposal. A delay in authorization of the alternate disposal request does not necessarily result in storage of waste awaiting disposal, since other disposal options exist.