

## Comments on HDP-RPT-FSS-202

- From the review the staff drew two conclusions
  - The current state of the release report is such that it is unacceptable for additional review as a template for future Release Records
  - Details contained within the Release Record continue to raise staff concerns that Final Status Survey (FSS) approaches have not been finalized and remain under discussion with the U.S. Nuclear Regulatory Commission (NRC) and that there remains issues associated with Westinghouse's implementation of the FSS. Absence the finalization of approaches, there exists the potential that the staff's ability to conclude that certain FSS approaches, protocols, methodologies, etc., will be acceptable and permit license termination may be jeopardized.
- The following are additional details which provide some examples of why the two conclusions were reached.

### Release Record as a Template

- Organization and format of the document does not and will not facilitate an effective and efficient NRC review.
- Format includes information which will be common for all Release Record Reports. It is not necessary that such information be repeated in every report. Examples of repetitive information include the following:
  - Section 1 with a description of the contents of Sections 2 – 7.
  - Section 2, Data Quality Objectives
  - Section 3.1, HDP Site Description
  - Sections 3.2.2, Historic Use (Documented Burial Pits) and 3.2.3, Historic Use (Undocumented Burial Pits)
  - Section 4.0, History of Operations and Section 4.1, Site Chronology
  - Section 5.1.1, Surrogate Evaluation Areas and portions of Section 5.1.2, DCGL<sub>w</sub> Criteria
  - Section 5.1.4, Soil Sampling; Section 5.1.4.1, Systematic Soil Sampling – Section 5.1.4.3 QC Sampling

Suggest that, to address the above, Westinghouse consider developing a "Survey Area Release Record Overview Document". This document would contain information which would be common to all Release Record Reports and upon approval would remain unchanged. Various items such as approaches, methodology, etc., detailed in the Overview Report could be referenced in the specific Release Record report as necessary.

- The section layout does not follow a logical sequencing. For example, the summary of characterization results follows the remedial action support survey summary.

Enclosure

- Rather than including summarized results for critical information, the report refers to one of 13 appendices, many of which are being relied upon as primary information rather than supporting information, which appendices typically are intended to be.
  - The information in appendices is normally digested by the licensee then clearly written up in the body of the report itself,
  - The appendices should serve as backup/source document information for the reviewer.
  - Rather, the report appears to rely on extensive referencing to these appendices and require the reviewer to interpret the information.
  - Appears that Appendices may have been an afterthought
- Many figures are poor quality or absent (example of absent figure is a map showing the background reference area and associated sample locations)
- There are incomplete attempts of inclusion of information/procedures/processes that have been the subject of deficiencies communicated to the licensee by the NRC. The licensee has not adequately discussed the changes, nor appropriately documented the changes to the FSS from what was described in the Decommissioning Plan (DP).
- There are numerous technical deficiencies associated with site procedures that have been the subject of previous NRC comments which remain unresolved. Absent an agreed approach moving forward, comparable Westinghouse and NRC conclusions on FSS survey units might not occur.
- There are numerous high level quality assurance errors in the document, such as incorrect reference to the appropriate Code of Federal Regulations (CFR) licensing type (part 50 vs. part 70), incorrect statement of error types for final status survey planning in the Data Quality Objectives (DQO) sections, etc. These mistakes in the most basic of tenets of being an NRC licensee and implementing a license termination program raise serious concerns as to the level of quality to be expected for the actual data provided in the document; the knowledge/competency of the personnel involved in the process and the quality of performance of the FSS.
- Other quality issues identified included:
  - There licensee stating in the text the number of samples but the number referenced are either inconsistent with the number in another sections or inconsistent with the number indicated on a figure.
  - In the Section on Sidewall Sampling for Tc-99 (5.1.4.4) the licensee violated its own reference with respect to the four (4) criteria they were to meet. The licensee only referred to first criteria (which they passed); 2) Ignored criteria two and three and; 3) failed criteria four (see page 6 of 81 for sizes of survey units relating to wall size).
  - Figures 6-2 and 6-3 had pink legends which indicated there existed certain areas which were inaccessible for GWS. Yet various statements in the document indicate that a 100% GWS was performed.
- The technical basis and justification was not provided for necessary evaluation for survey design items such as, but not limited to, investigation action levels, scan minimum detectable concentration (MDC), increase in derived concentration guideline

levels (DCGLs) for use to compare scan MDC and derived concentration guideline level elevated measurement comparison (DCGL<sub>EMC</sub>).

- The technical report is intended to serve as a prototype for future FSS report submittals. However, challenging aspects of the final demonstration of compliance with the dose criteria were not included in this technical report. Some of these aspects were not applicable to these survey units or cannot be completed at this time because other data is not available. It would be useful for Hematite to provide examples to the NRC of how they intend to implement these features in the Final Status Survey Final Report (FSSFR) early in the FSS process. For example, detailed calculations for the following were not included:
  - the final incorporation of the dose from the backfill and groundwater into the final demonstration of compliance,
  - the implementation of the three layer (surface, root, and excavation) DCGL approach, and
  - the inclusion of dose from elevated areas.
- The report did not contain specific sections documenting changes from the FSS survey design including field changes and anomalies occurring during the survey or in the sample results as was described in the DP.
- In the FSSFR, it would be helpful to have a table that summarizes the results from all survey units.
- Absent the presence of approved methodologies associated with the FSS and the availability of documents utilized by the licensee to demonstrate that the FSS requirements were met, a template cannot be approved.
- A second template is required if the licensee intends to incorporate FSS methodology which permits the utilization of DCGLs over all stratum rather than just utilizing the uniform DCGL.

#### Implementation of FSS Approaches

- Utilization of scan MDCs from NUREG-1507
- In Section 5.1.4.4 Westinghouse discusses a process that was developed “for determining when sidewall samples would be collected.” The process described does not automatically include sidewalls in the FSS sampling program. Instead, the process establishes a threshold for inclusion of sidewalls in the FSS sampling program. This methodology has not been approved by NRC staff. The appropriate threshold for consideration of impacted areas is the classification of the survey unit.
- Utilization of RASS samples in lieu of characterization samples to determine average enrichment that could remain within a survey unit