HSS Independent Activity Report - Rev. 0

Report Number: HIAR-SRS-2011-07-15

Site: Savannah River Site,

NA-26

Subject: Office of Enforcement and Oversight's Office of Safety and Emergency

Management Evaluations Activity Report for the Waste Solidification

Building Project Peer Review

Dates of Activity: 07/12/2011 – 07/15/2011

Report Preparer:

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Activity Description/Purpose:

At the request of the National Nuclear Security Administration (NNSA) Office of Enterprise Project Management (NA-APM-20), the Office of Enforcement and Oversight (Independent Oversight), within the Office of Health, Safety and Security (HSS), provided an expert to review the Waste Solidification Building (WSB) startup programs and procedures associated with worker safety and health, environment, and security. Criteria for the review was detailed in the Criteria, Review and Approach Document (CRAD) contained within the NNSA review plan, and the expert served as a member of the WSB Peer Review Team. This NNSA peer review process is an annual requirement for all NNSA design and construction projects costing \$100M or more.

Result:

NNSA Peer Reviews (PRs) are project reviews conducted by teams of outside subject matter experts (SMEs) with the intent of bringing a set of fresh eyes to the review. Peer Review Team members frequently bring experience to be shared from similar projects or projects that have similar constructs that have been successfully completed. A PR often will involve the comparison of project team practices with Department of Energy requirements, experiences and practices of similar successful NNSA project teams and recognized industry practices and standards. PRs are distinct from other types of reviews which focus on regulatory compliance in that PRs are intended to improve project performance independent of the administrative aspects of Critical Decision progression and to bolster the project team in the execution of the project.

The scope of the WSB Peer Review Team was defined in 12 CRADs that were grouped into three PR subcommittees for management; scope, schedule and cost; and technical issues. Onsite field work and data collection was performed during the period of July 12-15, 2011, and a draft report with recommendations was provided to the site for factual accuracy on July 15. The charge memorandum dated May 4, 2011, from the Federal Project Director of the WSB Project to the Director of the Office of Enterprise Project Management (NA-APM-20), requested the Peer Review emphasize and focus on the system testing and turnover planning and process during the review. Overall, the WSB Peer Review team provided a number of positive observations with respect to the status of the design and construction of the WSB, as well as offering 16 specific recommendations and an overall general recommendation that workshops be conducted to focus on the systematic, department-wide issue of the inability of equipment suppliers to provide Nuclear Quality Assurance-1 quality components to nuclear projects. Specific observations for the Environment, Safety, & Health/Safeguards & Security CRAD (i.e., CRAD 10), which was reviewed by an SME from HSS, are summarized in the following paragraph.

Summary of Results (CRAD 10):

CRAD 10 – Environment, Safety, & Health (ES&H)/Safeguards & Security:

Of the 12 criteria reviewed for this CRAD, four criteria were associated with ES&H requirements and standards; three were associated with work control and hazard analysis processes; two were associated with ES&H programs, administration and staffing; two associated with the integration of ES&H into construction and design; and one criterion was focused on safeguards and security. Positive observations were that the existing Savannah River Nuclear Solutions (SRNS), LLC institutional safety and health programs and procedures should be directly applicable to start-up and operational activities at the WSB, and that the WSB has incorporated a number of innovative engineering design features which will reduce worker exposures to hazardous chemicals and radioactive materials. In addition, two recommendations were offered, namely, to (1) revisit the ES&H staffing and resource plan for startup activities to ensure that both the number and type of ES&H resources are consistent with planned startup work activities; and (2) establish mechanisms within the WSB work control process to ensure that co-located hazards associated with construction activities are identified, documented, and communicated to SRNS startup workers prior to work being performed.

Overall: The Independent Oversight reviewer concluded that the review was disciplined, addressed the designated CRADs, and the WSB Project should benefit as a result of the review.

HSS Participants	References
1(lead). James Lockridge	
Were there any items for HSS follow up? ☐Yes ☒No	
HSS Follow Up Items	