DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 30, 2013

TO: S. A. Stokes, Technical Director

FROM: M. T. Sautman and D. L. Burnfield, Site Representatives

SUBJECT: Savannah River Site Weekly Report for Week Ending August 30, 2013

HB-Line: The DOE Readiness Assessment (RA) team found repeat issues that were cited by the SRNS RA and identified instances where the closure and verification process was not adequately executed for conduct of operations findings. Furthermore, the team identified several instances of non-conservative decision making related to training, drill programs, acceptance of system leaks, procedure compliance, and an unapproved procedure not identified as an open issue. As a result, the DOE team concluded that the conduct of operations functional area was not ready for DOE review and suspended the RA. The RA will resume when requested by the DOE line organization. The RA team issued an interim report addressing the remaining functional areas.

Many of the issues are related to the safety culture established by facility management. For example, facility management allowed a simulated transfer to occur that violated a procedure and some operators stated during interviews that they would accept direction from facility management to violate procedures. The team noted issues with performance of second person verifications, workers signing off steps before they were completed, incorrect execution of an alarm response procedure (ARP), and an ARP that was inconsistent with an operating procedure. Many of the training pre-start findings address who is allowed to conduct plutonium operations. For example, a standing order only allows a core team to perform these operations, but facility management had not defined the criteria for how the remaining operators will be qualified. The HB-Line watchbill would not prevent operators who have not received this specific task training from standing watch. In addition, the Phase II control room operator and first line manager written exams were approved in 2004. As a result, the written exam did not reflect the new equipment and operations as required by a DOE Order and some personnel had taken the exact same written exam several times as part of previous requalification cycles. In response to a site rep observation, the facility conducted upset drills during the DOE RA. While HB-Line conducts drills for events identified in the emergency planning hazards assessment, the RA team identified that the facility had canceled their operational drill program and operations personnel were not proficient at responding to alarms. The RA team also identified that findings from the SRNS RA were not properly closed. For example, SRNS closed a finding although not all of the affected personnel had completed training. In another case, a SRNS RA pre-start finding was closed by taking credit for a HB-Line ConOps [sic] Improvement and Sustainability Plan action that was due more than a month after the start of the DOE RA and which did not include any actions to validate its effectiveness. (See August 2 and 16, 2013 reports).

In response to DOE's suspension of the RA, SRNS has assigned the H-Area Director to take the full-time role of HB-Line Start-Up Integration Manager. In addition, several experienced SRNS personnel have been temporarily reassigned to HB-Line to mentor the facility management team on safety culture and disciplined operations. Other reassigned staff will help improve the conduct of operations performance of the operations staff. In parallel, SRNS will take actions to address training issues, restart their operational drill program, and get equipment ready.

Savannah River National Laboratory (SRNL): SRNL is inspecting the areas under the deck plates of the shielded cells to eliminate as much excess material as possible prior to replacing the cell windows. They found a legacy container of sludge from Tank 16 in this area under cell 10. The material in the container was not previously in the inventory of special nuclear material. The estimated quantity of material has now been entered into the Radionuclide Inventory-Administrative Control program and did not result in a change to the consequences. They will complete an isotopic analysis within 2 weeks.