DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 29, 2010

TO: T. J. Dwyer, Technical Director
FROM: D. L. Burnfield and M. T. Sautman, Site Representatives
SUBJECT: Savannah River Site Weekly Report for Week Ending January 29, 2010

R Reactor: After grouting uncontaminated drains in a bathroom, workers noticed an unlabeled pipe that was beyond their planned scope of work for the day. Without consulting their work package, the supervisor authorized the workers to perform a line break. Unfortunately, the work package identified this pipe as process sewer piping (from an adjacent laboratory) and required a contamination area to be set up before this piping was breached. After the line break, the Radiological Control Inspector (RCI) surveyed the pipe, which is a standard practice even for clean pipes. Beta-gamma contamination was detected and work was stopped. Although no radiological personnel protective equipment was used besides the RCI's gloves, no one was contaminated. The Site Rep is concerned about the poor work control and conduct of operations exhibited in this event despite months of corrective actions.

K-Area: The Site Rep observed an oral board for a Shift Operations Manager, where the depth of questioning was severely lacking. Detailed comments were provided to facility management. Other DOE and contractor observers had similar comments. Oral boards in K and L are on hold now until improvements are made with the question bank and board composition and conduct.

Savannah River National Laboratory: A RCI performing routine radiation surveys of laboratory hoods found contamination on the lip of a hood where a technician was in the process of analyzing very small vials of plutonium solution samples. As a result, the RCI began surveying the technician, who was found to be contaminated in several areas. The technician's lab coat had thousands of dpm alpha contamination on the abdomen and right arm with additional contamination on her lapel. When the technician was sent to the decontamination room, additional contamination was found on her personal clothing and on her skin in the vicinity of the lapel. Surveys of the laboratory also detected contamination on a nearby counter outside of the hood. The investigation is ongoing and is examining how much contamination control and monitoring practices may have contributed to the spread of contamination outside the hood since no evidence of a spill or splash has been identified so far.

Procedures: The Site Rep met with the SRNS Director of Site-wide Procedures to discuss their Site-wide Procedures Strategic Plan. Access to procedures has been consolidated on the site's intranet. An electronic procedure system being used for tritium operations will be rolled out to the rest of the site in the coming months. Electronic rounds currently used at H-Canyon and Tritium will be expanded to additional facilities. Streamlining efforts have identified 2678 procedures to be canceled or deactivated out of 11,428 procedures at SRS. Related to this, SRNS is planning to rename and realign the current site-level manuals (e.g., 2S, 8Q) into functional manuals (i.e., Operations, Maintenance Programs). The manuals would have a standard format to have a consistent document flow of the bases documents; policies; directives; programs and process descriptions; and then site, company, and facility-level procedures. Furthermore, SRNS is adopting procedure formats developed by the Nuclear Energy Institute and the Institute of Nuclear Power Operations. Finally, all procedures writers will be certified by the Procedure Professionals Association.

Recommendation 2001-01: DOE-SR approved Revision 15 of the Liquid Waste System Plan and the supporting Technical and Programmatic Risk Assessment Report.