

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 16, 2009

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 October 16, 2009

SRR Safety: The DOE-SR Manager sent a message to SRS employees expressing concern with recent injuries. He has asked site management teams to develop plans to place an increased emphasis on worker safety and encouraged employees to implement the Integrated Safety Management System core functions for each task they perform. In addition, a letter was sent to SRR about the unfavorable trend in their performance (see 6/19, 9/4, 10/2, and 10/9/09 reports) and requested to be briefed on their planned corrective actions. Finally, SRR began conducting safety briefings to workers during a week-long safety pause. These briefings reemphasized the recent events that have occurred not only at SRR but also at SRNS and Parsons.

SRNS Safety: The Site Reps observed work package reviews, work release, and work in progress under the SRNS Safety Improvement Compensatory Actions and Measures plan. SRNS implemented their Safety Improvement Compensatory Actions and Measures plan across SRS (see 10/2/09 and 10/9/09 reports). Work appeared to be well planned and controlled during the observed evolutions.

H-Tank Farms: While preparing to insert a new Salt Solution Feed Tank transfer pump for the Modular Caustic Side Solvent Extraction Unit, the thin pump shaft was bent. Engineers were already busy trying to locate a new pump design because the inadequately supported impeller drive shaft had previously led to five pump failures during operations.

An Engineering review of received alarms found that over the last 14 months, an average of 6320 alarms were received every month. Many of these can be attributed to a few problematic alarms that regularly show up on the top ten list. For example, in August one alarm was received 5992 times. A safety-significant alarm went off 916 times last month. Operations management is taking action to focus on repairing, replacing, redesigning, or taking out of service (when not applicable, for example those only needed during transfers) these problematic alarms.

Saltstone: Based on processing data and inspections, engineers believe the most plausible scenario for the last plugging event involved dry feeds, which had accumulated in the chute from the premix weigh hopper to the mixer. This material is believed to have broken loose during the second setback, worked its way through the mixer, and then was deposited in the bottom of the hopper. Management hopes to resume grouting very soon.

Traffic Controls: The Site Rep reviewed the proposed controls for 1) handling transuranic waste drums with a higher material at risk outside F-Canyon and 2) the transfer of Hanford Pu-238 containers from H-Canyon Outside Facilities to HB-Line. The Site Rep questioned why 1) the credited controls at F-Canyon did not include any traffic controls to prevent pool fires and 2) the lack of specificity in the Specific Administrative Control for preventing motor vehicle impacts in H-Area. (See 10/9/09 report).

Criticality Safety Interface Meeting: The Site Rep attended the meeting. During the meeting, it was noted that the H-Canyon, where the fuel was recently dropped, has not had a functioning Criticality Safety Committee Meeting for a while. The necessary support work, including identification of members and revising the charter, has been accomplished; however, it remains for management to name a chairman and to call the first meeting.

