

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 25, 2011

TO: T. J. Dwyer, Technical Director
FROM: M. T. Sautman and D. L. Burnfield, Site Representatives
SUBJECT: Savannah River Site Weekly Report for Week Ending March 25, 2011

Board Visit: Ms. Jessie Roberson (the DNFSB Vice Chairman) and Mr. Joseph Bader (Board Member) visited the site this week. They walked down the Waste Solidification Building and the F-Tank Farm and toured the Mixed Oxide Fuel Fabrication Facility. They reviewed Salt Waste Processing Facility construction progress, Liquid Waste Management safety and project risk reduction and conduct of operations performance, and the effect of the SRNS work force reduction on areas that affect nuclear safety.

Emergency Preparedness: In response to a recent Institute for Nuclear Power Operations Event Report and an upcoming DOE safety bulletin, SRR and SRNS are reviewing their natural phenomena hazard (NPH) scenarios currently in their Documented Safety Analyses, beyond design basis accidents, and the expected facility status following a beyond design basis NPH event. One of the goals is to identify potential actions to mitigate the impacts of such an event. These could include modifications to support emergency power restoration or allow the installation of backup ventilation fans.

F-Canyon: DOE commenced their Readiness Assessment (RA) for the remediation of transuranic waste boxes. Areas of interest include the understanding and implementation of specific administrative controls, the interface between the F-Canyon shift operations managers (SOMs) and the waste remediation crews, and training. Interviews with the workers and SOMs showed little improvement from the contractor RA.

SRNS Personnel Changes: SRNS announced that Mr. Dennis Donati would replace Mr. Chris Gentile as the new Vice President, National Nuclear Security Administration (NNSA) Programs. He is responsible for Tritium Operations; the Waste Solidification Building construction project; and the Pit Disassembly and Conversion construction project. Most recently, he was the Director of Program Management, National Aeronautics and Space Administration Business Segment in Phoenix, Arizona. Mr. Richard Burns, the facility manager of H-Canyon, announced his resignation. In the recent past, he also served as the HB-Line facility manager. Mr. Tony Umek will return to the Fluor Corporation in Richland Washington. Ms. Alice Doswell will replace him as the SRNS Vice President for Environment, Safety, Health and Quality (ESH&Q). Ms. Doswell previously served as the DOE-SR Assistant Manager for Safety and Health Programs and the ESH&Q Manager for the Salt Waste Processing Facility Project.

K-Area Electrical Safety Incident: While working to install ducting for the Purification Area Vault project, SRNS personnel cut a hole approximately 3' x 5 ½' in the roof to install a new HVAC duct. Before they cut the hole, they performed document reviews, a ground penetrating radar survey, and drilled pilot holes in search of any potentially energized conduit. They also performed a lockout on the nearby lighting and receptacle circuit. When they removed the slab, they discovered two previously unidentified embedded conduits that they had cut. One contained two wires and the other four wires. After the hole was cut, they installed heat shrink material on each conductor to prevent inadvertent contact with potentially energized conductors and the area around the cut conduits was barricaded. They then reviewed the drawings for L-Reactor and found the breaker for the Elevator Lighting Transfer Relay had tripped. This was the first time that they surmised that the power had been on when the cable was cut. They reset the breaker and voltage checks confirmed that the circuit was the power source for the conduit with the two conductors. They opened the breaker to de-energize the conductors. At the request of the site rep, they are expanding the troubleshooting to determine if either of the cables was connected to a safety system.