

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 14, 2014

**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 February 14, 2014

**Ice Storm:** A severe ice storm struck the Central Savannah River Area causing widespread power outages in the surrounding communities. As a result, the Savannah River Site was closed Wednesday through Friday. Parts of the site experienced temporary power losses including two fire stations, the Salt Waste Processing Facility construction site, the Effluent Treatment Plant, and parts of H-Tank Farms, S and Z-Areas. The site closure interrupted the review of the electrical safety systems at the Defense Waste Processing Facility that Ajit Gwal and Peter Foster were conducting.

**235-F:** The Technical Safety Requirements (TSR) basis incorrectly states that the E-1 low vacuum alarm activates locally and remotely when, in fact, it only activates remotely in the control room. During the development of the Basis for Interim Operations (BIO), engineers changed the design of the alarm. While the BIO was updated in several locations to reflect the correct configuration, the incorrect description was left in two sections. SRNS declared a TSR violation because the TSR surveillance was not completed as described in the TSR.

**Defense Waste Processing Facility (DWPF):** Because of an anticipated gap in storage locations between the expected canister generation rate and the construction of additional canister storage capability, SRR evaluated various options to provide additional near-term storage. SRR is currently pursuing a concept where the plugs and canister supports in existing canister storage wells would be modified to allow two low wattage canisters to be stored vertically in a well. SRR is performing structural and heat transfer analyses to evaluate the feasibility of this concept.

A rigger became contaminated (30,000  $\beta\gamma$  on his pants pocket) while performing maintenance on the crane in building 512-S. While DWPF personnel had partially decontaminated the facility recently and rolled it back from a contamination area to a radiological buffer area, the procedure and hazard analysis had not been updated since March 2013 and the riggers had not performed maintenance in this facility since it was rolled back. When the riggers contacted the radiological protection department (RPD) personnel, RPD correctly told the rigger that a radiological work permit was not required. DWPF personnel authorized the work, but the riggers failed to obtain approval from the shift operations manager as required by the authorization. The rigger who was to operate the crane then donned unauthorized anti-contamination clothing (booties and gloves), in violation of standard site practices, and used the pendant to operate the crane, because it was expedient for other work being performed. Even though the pendant was bagged as potentially contaminated and stored more than 7 feet above the floor, they failed to notify RPD as required by normal site work practices for work above 7 feet. Other contributing factors included not having the correct precautions prominently posted on the wall of the facility about potential contamination and not ensuring that the bagged pendant was properly labeled as potentially contaminated.

**Earthquake:** On Friday night, an earthquake shook the local area. The US Geological Survey reported that the earthquake had a 4.1 magnitude on the Richter scale and its epicenter was approximately 40 miles from the Jackson Barricade. SRS did not report any chemical or radiological releases, facility damage, or injuries.