

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 13, 2006

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** J. S. Contardi/M.T. Sautman, SRS Site Representatives  
**SUBJECT:** SRS Report for Week Ending January 13, 2006

**Fee Reduction:** Recently, the Department of Energy Savannah River Operations Office (DOE-SR) notified Washington Savannah River Company that a fee reduction will be levied for unsatisfactory performance. Specific areas identified as not meeting the Department's expectations were, criticality controls, inadvertent transfers, and conduct of operations. Up to \$300,000 may be withheld if performance does not improve through the remainder of the existing contract.

**Savannah River National Laboratory (SRNL) Fire:** On Tuesday, a fire occurred in a non-radiological portion of SRNL. The fire occurred while two workers were cleaning an attriter mill prior to placing it in storage. The mill had previously been used in an inert glovebox to process pyrophoric metals. Prior to removing the equipment, the workers wiped down the mill in order to passivate any residual pyrophoric material. Once the mill was removed from the glovebox, the workers cleaned it once more with isopropyl alcohol. The fire occurred during this final cleaning outside of the inert glovebox. A job specific hazards analysis had been performed for passivating the equipment in glovebox but not for cleaning outside the glovebox. One of the workers received burns to the head and was transported to offsite for medical treatment. DOE-SR will investigate the event as a formal Type B accident investigation.

**Functional Classification Methodology:** WSRC recently approved a revised site procedure which defines the dose criteria for collocated workers during postulated natural phenomena events. The new procedure no longer considers the stochastic effects of radiation for this specific worker group. The change significantly reduces the conservatism used to identify the performance category of new nuclear facilities. DOE-SR was made aware of the revision from the site reps. Based on concerns raised by the DOE-SR and the site reps, WSRC has retracted the procedure to allow a more formal review of the technical basis for the change.

**Contract:** The SRS contract was extended through 12/31/06. A Notice of Intent was published to extend the liquid waste portion of this contract through 12/31/07.

**Defense Waste Processing Facility (DWPF):** The contractor's calculations indicate that if hydrogen accumulated inside of pipes, jumpers, or tanks and exploded, the components can endure one or multiple explosions based on the peak explosion or deflagration to detonation transition pressure developed in the component. The exception is the seal pot cover plate, which might rupture. Estimated pressures were calculated to reach up to 1800 psig.

**H Completion Project:** The final phase of the Integrated Safety Management Improvement Assessment was conducted. While improvements in conduct of operations and procedures were noted, there were still weaknesses with engineering, and corrective action management.