

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 16, 2007

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: J. S. Contardi/M.T. Sautman, SRS Site Representatives
SUBJECT: SRS Report for Week Ending March 16, 2007

Training: A Site Rep review of the qualification status of Department of Energy - Savannah River Office personnel assigned to facility representative, safety system oversight, and Technical Qualification Program positions found a number of individuals who are overdue in completing their qualifications. Examples include a person assigned to their current position in 2004 and a senior technical safety manager who has been in their current position for more than two years and is nearly six months past their due date. DOE-SR senior management was already taking actions to fix this situation.

Plutonium Operations: The Site Rep observed the processing of plutonium material in HB-Line. The evolution required cutting open both the outer and inner DOE-STD-3013 container for subsequent shearing operations. Both the conduct of operations and radiologic support were adequate. The lighting in the glovebox has been improved since the last time the Site Rep observed similar operations (Site Rep Weekly 2/2/07).

Tritium: A control room operator (CRO) stopped work on process line 2 to request that an engineer evaluate his instrument readings. When the engineer later informed the CRO that work could continue on line 2, the CRO resumed the procedure, but forgot that he had since started work on line 3 and that the distributed control system was still on line 3. As a result of performing the line 2 actions on line 3, a rupture disk was blown on the low pressure side of the line.

During the last year, several dozen tritium air monitor (TAM) pump replacements were likely performed without a hot work permit or the Quality Assurance (QA) hold point that is required when soldering safety significant parts. However, operability of the TAMs was still verified afterwards since a monthly surveillance procedure was performed during post-maintenance testing. The QA hold point could have been better identified in the pre-approved troubleshooting plan.

Solid Waste Management Facility: The three bulged drums will be loaded into concrete culverts for now. Additional analysis is needed to determine the potential internal pressure of a bulged drum. In addition, venting might release contaminated, pressurized gas and the resulting decontamination could significantly impact drum remediation (Site Rep Weekly 2/9 & 2/16/07).

K-Area Complex: The contractor declared a Potential Inadequacy in the Safety Analysis (PISA) because a recent calculation indicates that the pressure within certain nuclear material packages may be higher than previously calculated. The safety basis credits the package for ensuring radioactive material releases are negligible during a fire event. The new information indicates that the pressure increases during a fire could significantly exceed the working pressure of the package. Fire watches have been established during forklift operations as a compensatory measure.

H Area: The Site Reps continued their review of the condition of H-Canyon and HB-Line, possible upgrades, and other actions that might be needed to support future processing.