

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 21, 2006

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** J. S. Contardi/M.T. Sautman, SRS Site Representatives  
**SUBJECT:** SRS Report for Week Ending July 21, 2006

**Contaminated Sealed Source Recovery:** This week the contractor removed the contaminated source from the gamma beam irradiator (GBI) (Site Rep weekly 7/14/06). Several attempts were necessary due to poor procedure compliance and configuration management. An initial attempt failed as a result of a foreign object in the GBI. Following an investigation, the foreign object was determined to be a non-radioactive “dummy” source which inadvertently occupied the same location as the 6,000 curie cobalt-60 source. This configuration is referred to as a double stack with the dummy source on top of the cobalt source which unknowingly prevented the capture the cobalt source. A subsequent attempt proved unsuccessful when the dummy source was inadvertently captured instead of the cobalt source.

**Plutonium Operations:** This week, the Site Rep and representatives from DOE met with the contractor to discuss the K-Area Interim Surveillance project authorization basis. Concerns were raised with the use of administrative controls versus engineered controls, the basis and controls for ensuring the fire door is closed during a postulated fire event, and the storage of transuranic waste in a portion of the facility which lacks filtered ventilation or fire suppression. In response to a previous concern, the contractor is developing a design change to remove a legacy portion of ductwork which represents a potential II/I seismic interaction (Site Rep weekly 6/2/06).

**Old HB-Line Ventilation Upgrade:** The contractor has successfully transferred ventilation from the old system to the new fans. However, during a test of the new redundant fan the damper on the first fan failed to close. The damper had previously been tested before installation but did not function as required during the fan swap. A proper signal from the programable logic controller was verified. Further investigation revealed improperly landed electrical leads relating to both dampers.

**Solid Waste Management Facility:** At the Modular Repackaging System (MRS), a radiation control inspector noticed airborne radioactivity levels increasing after a bagout cut and evacuated the work crew before the continuous air monitor (CAM) alarmed. This was the second chronic CAM alarm at MRS in the last three weeks (Site Rep weekly 7/7/06).

**K Area Complex:** The Site Rep observed a dry run and interviews for the Readiness Assessment (RA) of the receipt and storage of special nuclear material in a new storage vault. The Site Rep discussed the RA team’s independence with the team lead because the lead was listed as an assessor, first/second approver, final approver, and/or Functional Area Manager (FAM) for three functional areas during the project’s self assessment. Furthermore, a team member was listed as the FAM for the same functional area they were reviewing as part of the RA and was identified as the lead for closing two self-assessment finding corrective actions. Although there was no evident bias and their actual roles were different from the roles implied by the approval sheets, the maintenance of the RA team’s independence could be crisper.