## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 15, 2006

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director

**FROM:** J. S. Contardi/M.T. Sautman, SRS Site Representatives

SUBJECT: SRS Report for Week Ending September 15, 2006

Tritium Extraction Facility (TEF): The contractor Operational Readiness Review (ORR) identified 34 findings. The team's most significant finding was that the facility did not demonstrate that personnel could adequately respond to and mitigate a TEF related emergency. Weaknesses in command and control, communications, radiological response, mitigation, protective actions and the players critique were identified during the five drills. The facility graded the full scope drill as unsatisfactory because Limiting Conditions for Operations-required actions were not met after a fire sprinkler was isolated, the fire department did not take required protective actions upon arrival, and there was an excessive delay in the fire department reaching the fire. ORR team and staff observations go beyond those identified in the facility's drill report.

HB-Line: The contractor decided to commence their Readiness Assessment (RA) for the 3013 Processing Project with an unapproved authorization basis (AB) included on their "manageable" list of open items. Due to staffing constraints and other priorities, the Department had not issued their approval for the AB by the expected date although they reportedly had concluded their technical review. The contractor plans to extend the RA an additional week or so to allow the RA team to review the AB once it is approved. The Site Rep objected to this approach because having an approved AB is a core requirement in the DOE Order and an unapproved AB is considered to be inappropriate for the list of open items. Since an approved AB is usually listed as a prerequisite for commencing readiness reviews, this normally would have been prohibited. However, this RA's Plan of Action only included prerequisites for starting actual operations, not for starting the RA as required by the DOE Order and site procedures. In addition, artificially extending reviews to allow for the completion of open items dilutes the line management's certification of readiness. These issues have been brought to senior contractor and DOE management's attention.

Annual Site Emergency Preparedness Exercise: The Site Rep observed a no-notice exercise simulating a glovebox deflagration that resulted in a tritium release from the H-Area New Manufacturing facility. The Emergency Duty Officer was focused, fast, and managed the resources in the Operations Center effectively. Because of the recovery team's apparent lack of familiarity with the recovery planning process, the developed recovery plan was a "plan for a plan" that mostly listed tritium subject matter experts who were tasked with identifying the necessary actions and requirements for their topic. However, the plan never really defined what recovery actions were to be performed. According to procedure, the recovery plan is to define the overall strategy and the tasks to be accomplished, establish reentry requirements for evacuated facilities, and identify both near and long term requirements for the recovery actions.

**Saltstone:** A definitive cause for the plug 2 weeks ago has not been found. However, engineers suspect the plug was caused by a combination of 1) oscillation in salt solution feed allowed a slug of dry material to pass through and 2) the 10" mixer discharge leg was already partially restricted. Recovery actions are still ongoing to support a Readiness Assessment in October.