DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 30, 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 30, 2007

Tritium Operations: Following the removal of a lockout on a process bed, facility personnel discovered that the system had not been reconfigured as required. Specifically, one of the three line breaks was not restored as required in the line break procedure. The line break points were properly labeled, but communication and control of the line breaks were less then adequate.

While removing a process bed in the Tritium Extraction Facility, a process outlet line was bent. Two operators were hoisting the bed in order to position it for a heater element replacement. During the lift, the outlet line hit another insulated line. Work planning for the job included potential interferences, but did not specifically address the process line which was hit.

An extent of condition review of 92 maintenance troubleshooting packages involving safety-significant (SS) equipment found that the previously identified quality assurance (QA) problems (Site Rep weekly 3/16/07) extended across all the tritium facilities. For example, there was no bill of material (BOM), commercial grade dedication, replacement item evaluation, or QA hold point for 21 packages involving SS equipment. Five completed packages specified the wrong part number (although the BOM was correct), but this was not noticed during installation. There was not enough information available in many of the completed packages to determine if the work met all QA and engineering requirements or not. All pre-approved troubleshooting procedures are suspended until they are reviewed/revised and training is conducted.

HB-Line: While conducting a jet transfer for Phase II operations, a safety significant pressure alarm was received for a vessel not involved in the transfer (i.e., the alarm was not expected). The control room operator acknowledged the alarm, but soon after became distracted by other control room activities. As a result, the operator failed to notify the shift manager or implement the associated alarm response procedure. The alarm cleared soon after it was received, but the appropriate limiting condition for operations was not entered until the alarm was rediscovered by a facility engineer the next day. Facility management has formally reported the event.

Saltstone: Leachate has been pumped from vault 4 to the Salt Feed Tank. Until this material is processed, not even batch 0 waste can be processed anymore.

Defense Waste Processing Facility: It may take 18 months to upgrade 11 of the 151 piping systems where a deflagration due to hydrogen accumulation may cause fragments that could damage nearby safety equipment. However, the increased risk due to the delay is relatively small since the trajectory paths for the fragments to safety equipment tend to be tortuous.

Modular Caustic Side Solvent Extraction Unit: The Site Rep walked down the facility and discussed some Test Deficiency Report documentation issues with the Test Manager.

Solid Waste Management Facility: Three more bulged drums were found and left in a culvert.