

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 24, 2005

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: Michael J. Merritt, DNFSB Site Representative
SUBJECT: Lawrence Livermore National Laboratory
Report for Week Ending June 24, 2005

Plutonium Facility Resumption Status: LLNL is continuing its Management Self-Assessment (MSA) for resumption of “reduced activity” in the Plutonium Facility. The MSA is being conducted in accordance with an MSA plan that was issued on June 2, 2005. As of this week, all but four of the Technical Safety Requirements (TSR) management programs have been reviewed. The four TSR program reviews that are still in progress are fire protection, configuration management, facility operating records, and Safety Analysis Report (SAR) assumptions. The MSA effort is on-track to be completed by July 5, followed by a declaration of readiness in the last half of July as described in the Plutonium Facility Resumption Plan (see weekly report dated May 27, 2005).

Consistent with the MSA plan, each of the management programs is being reviewed using a criteria review and approach document (CRAD) to assist the subject matter experts in assessing each program. Any deficiencies noted in satisfying the CRAD requirements are documented as findings and are entered in to an issues tracking system. Facility management is assigning corrective actions for each finding to a responsible individual. Correction of findings is being pursued in parallel with the conduct of the MSA. Currently there are approximately 70 findings. One area with potentially challenging problems is the procedures program. As part of improving the procedures process, Plutonium Facility management is developing a conduct of operations manual. The manual is intended to improve the facility workers discipline in procedural adherence. Also, many of the facility procedures are being updated. In order to effectively implement these manuals and procedures, retraining of facility personnel will be necessary.

In parallel with the MSA, a readiness assessment (RA) for reduced activity is being planned. LLNL provided a contractor readiness plan to the Livermore Site Office on June 13, 2005. The readiness plan identifies the scope of nuclear activities covered by the review and the CRADs to be used by the independent RA team. The plan also identifies the RA team members that includes both LLNL subject matter experts and expert consultants.

Plutonium Facility Occurrence: On June 14, 2005, Plutonium Facility personnel received an alarm on the Uninterruptible Power Supply (UPS) indicating a malfunction with the system. This malfunction was similar to a previous event that occurred on May 31, 2005 (see weekly report dated June 3, 2005). The response to the alarm and the follow up actions taken by facility personnel were appropriate. The UPS is defined as safety-class equipment as part of the Emergency Power System in the current SAR, however, there are no longer any safety-class loads on the UPS. Investigation of the repeat failure by a vendor technician revealed that the Plutonium Facility personnel had not received the notice to make a change required by the manufacturer's field service manual. As a result, the required field change had not been implemented in the Plutonium Facility UPS. The technician completed the required field changes using an emergent work permit in accordance with the facility work control process. The equipment failure was reported as an update to the previous occurrence report (ORPS report OAK-LLNL-LLNL-2005-0042).