

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 23, 2005

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: Michael J. Merritt, DNFSB Site Representative
SUBJECT: Lawrence Livermore National Laboratory
Report for Week Ending September 23, 2005

Plutonium Facility Readiness Assessment Reports: LLNL and the Livermore Site Office (LSO) have issued their final reports on the Plutonium Facility readiness assessment (RA) for reduced activities. The LLNL report identified three pre-start findings and nine post-start findings. The LSO report identifies three pre-start findings and five post-start findings.

The pre-start findings identified in the LLNL report are primarily related to conduct of operations implementation and the control and use of procedures. The pre-start findings are summarized below:

- Mechanisms for ensuring critical elements of the conduct of operations manual are implemented are not yet in place;
- Some surveillance, administrative control, and operating procedures are past their expiration dates; and
- The compensatory measure for use of administratively expired procedures is inadequate.

The report also acknowledges two pre-start findings from the facility's management self-assessment (MSA) report that identified the need to establish a check list for resumption of facility work stations and training of facility personnel on the requirements of the conduct of operations manual. Both of the MSA pre-start findings have been addressed.

The radiation protection section of the LLNL RA report identifies an issue related to the implementation of the unreviewed safety question (USQ) process that may adversely impact safety. The concern is that the extended time taken to perform USQ evaluations may delay implementation of changes and improvements needed to enhance safety. The LLNL report is also critical of the approach used in this RA where LLNL and LSO performed concurrent reviews. In the view of the LLNL RA team, the conduct of this concurrent review complicated the review process. In some cases, the conduct of the LSO review disrupted the ability of the LLNL RA team to complete its review.

The LSO RA report confirms many of the observations contained in the LLNL report. The LSO pre-start findings are summarized below:

- Procedures to be used for limited operations do not identify the "level of use" category as required by the conduct of operations manual;
- The quality assurance process for identification and disposition of nonconforming conditions is not consistently followed; and
- Management oversight of the use of hand and foot monitors for contamination control has not been demonstrated.

Post-start findings in the LSO report include a lack of consistency in performing causal analyses, no formal process for performing management walkthroughs, and the lack of a mechanism for maintaining a listing of current safety basis documents.