

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 18, 2005

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: Wayne L. Andrews, Jr., Acting DNFSB Site Representative
Lawrence Livermore National Laboratory (LLNL)
SUBJECT: Report for Week Ending February 18, 2005

Activity Summary: Michael Merritt was on leave for the week. Wayne Andrews was on site all week to provide support to the DNFSB site office.

Plutonium Facility Operating Status: For the most part, the Plutonium Facility remains in Standby mode, but certain programmatic work has been authorized by the Livermore Site Office (LSO). On February 3, 2005, LSO approved LLNL's request to "process, transfer, and measure four items to close out a past inventory," as well as their request to "conduct operations in support of bimonthly MC&A inventory." The latter activity is not a simple one. To quote from the LLNL request, "Approximately 60 items currently in glove boxes will be stabilized, packaged and transferred to Materials Management for measurement and storage in vaults, or in some cases will be returned to the glove boxes." Among other activities, LSO has also approved packaging and shipping two JASPER targets to the Nevada Test Site and moving special nuclear material to the Hardened Engineering Test Facility for measurement. LSO justified these approvals based on the immediate compensatory measures as well as the existing Plutonium Facility safety basis.

On February 9, LLNL requested "LSO approval of a set of compensatory measures for standing up to a limited level of programmatic, facility, and security activities," while at the same time identifying additional compensatory measures for reduced activity in the Plutonium Facility. In general, LLNL proposes to continue the stand down for work on legacy material while restarting work at approximately the fifty percent level for other plutonium-related activities. This is essentially restarting the facility, yet no readiness review is planned in the near future.

Authorization Agreements (AA): The LSO procedure governing AAs has many requirements regarding their scope, development, approval, maintenance, reevaluation of format and content, lessons learned, and verification of implementation. For the existing AAs (whether expired or not) it does not appear that all of these requirements are being met. For example, in Section 5, *Requirements and Conditions for Operations*, of each AA, a number of Safety Management Programs (SMPs) are cited as being necessary for operations. In the case of the Plutonium Facility, many of these SMPs (e.g., USQ, Configuration Management, QA, etc.) have been declared ineffective by the contractor. Yet nuclear activities continue at a reduced level with certain immediate compensatory measures in place, and the contractor has requested increasing the nuclear operations tempo significantly without first ensuring that the *Requirements and Conditions of Operations* cited in the AA are all in place and effective.

One might assume that the SMPs in the Plutonium Facility should be of the highest quality because the relative risks associated with the nuclear activities there require it. Thus, if these required SMPs are ineffective in the Plutonium Facility, one might want to assess these and other SMPs in the remaining Category 2 facilities on an urgent basis to determine whether they are effective.

Some of the AAs for operational Category 2 nuclear facilities have expired. The LSO procedure clearly states that, "A statement of agreement shall be contained in the AA that the AA is a contractually binding agreement between DOE and the contractor upon contract modification and execution. Therefore, the AA must have an effective date and an expiration date that defines the time period for which activities are authorized."