

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 29, 2005

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: Michael J. Merritt, DNFSB Site Representative
SUBJECT: Lawrence Livermore National Laboratory
Report for Week Ending April 29, 2005

Final Environmental Impact Statement: This week, the Administrator of the National Nuclear Security Administration issued the *Final Site-wide Environmental Impact Statement for Continued Operation of LLNL and Supplemental Stockpile Stewardship and Management Programmatic Environmental Impact Statement*. The EIS analyzes potential environmental impacts of three alternatives. The alternatives are no action (continued ongoing operation), the proposed action (continued operations plus new facilities and new operations), and reduced operations. A Record of Decision can be issued after a 30 day waiting period.

The proposed action includes new programs that could potentially increase the quantity of nuclear material in some LLNL nuclear facilities. Specifically, the proposed action would increase the administrative limits in the Plutonium Facility to 1,400 kilograms from the existing 700 kilograms. Additionally, the proposed action would increase the plutonium material-at-risk limit from 20 kilograms to 40 kilograms of fuel-grade equivalent plutonium in each of two rooms in the Plutonium Facility. According to the EIS, the room limit increase is necessary to meet future Stockpile Stewardship Programs such as the casting of plutonium parts.

If selected, the proposed action would also increase the Tritium Facility administrative limit for tritium operations. The facility administrative limit for material-at-risk would be increased from 30 to 35 grams of tritium and the limit for material-at-risk for a single work station would be increased from 3.5 to 30 grams of tritium. According to the EIS, the increases are needed to support future planned Stockpile Stewardship Program activities such as the high-energy density physics target fill and the Test Readiness Program.

Other nuclear activities included in the proposed action are direct shipment of transuranic waste from the Superblock and increased highly enriched uranium (HEU) limits for the Radiography Facility. NNSA is proposing to develop the capability to load transuranic waste into pipe over-packs in the Superblock beginning in fiscal year 2005. The pipe over-packs would allow up to 80 plutonium-equivalent curies per drum and up to 200 fissile-grams equivalent. Also included in the proposed action is to increase administrative limits for HEU in the Radiography Facility from 25 to 50 kilograms. Again, the EIS cites the need for the increase to support Stockpile Stewardship Program activities.

Independent Oversight Inspection: On April 20, 2005, the Livermore Site Office (LSO) approved and submitted the corrective action plan developed by LLNL for the Department of Energy Office of Independent Oversight and Performance Assurance (OA) inspection report to the Deputy Administrator for Defense Programs. The LLNL corrective actions include institutional improvements as well as facility-specific actions. The institutional findings are primarily related to the implementation of Integrated Safety Management. Many of the facility-specific issues relate to the Plutonium Facility operations and associated corrective actions will be implemented as part of the resumption strategy for the facility (see weekly report dated April 22, 2005).