

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 13, 2004

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending August 13, 2004

LANL Resumption Status: LANL has divided resumption of low-risk activities into 348 projects and resumed about 97 % of these as of Friday morning. LANL has also trained more than 800 people on the readiness verification process for resuming moderate and higher hazard activities (i.e., risk levels 2 and 3). The resumption process is as described last week. NNSA Site Office (LASO) oversight is being temporarily supplemented by a team from the DOE Office of Assessment (DOE-OA).

On Thursday, the LANL Resumption Review Board (RRB) began reviewing startup notification reports (SNRs), which define the activities to review for resumption, the review team constitution, the criteria, and the approach. At this time, LANL anticipates 33 management self assessments (MSAs) on level 2 and 3 activities, followed by 12 readiness assessments (RAs) of level 3 activities. As an example, TA-55 and CMR plan to present their first SNR to the RRB on Monday. It will cover nuclear infrastructure, including cleanup of the room contaminated with Pu-238 last August – a high priority. This will be followed by two other MSAs covering nuclear programs and Pu-238 operations.

A few of the challenges are (1) the large scope of some of these assessments, which will require smart sampling; (2) ensuring that all LANL moderate and higher hazard activities are captured within an appropriate assessment; and (3) achieving proper balance between timeliness to resuming national security programs and sufficient assurance that the safety/security/compliance objectives have been met. For example, each nuclear activity will be assessed against 53 individual criteria; a facility like TA-55 will have dozens of processes/activities that need to be assessed against each of these criterion, resulting in thousands of point-assessments. NNSA and LANL management are emphasizing assessments that are both thorough and timely. There is awareness that an overly-extended shutdown of nuclear operations can create new safety issues, such as those experienced at some DOE sites in the early 1990s, and that many issues found will need to be addressed on a timely basis after resumption.

Plutonium Facility: This week, LANL continued their accelerated preparations for loading shipping containers with seal-welded cans of plutonium oxide to support the MOX program. LANL has divided the operation into two parts: (1) loading/staging the shipping containers and (2) moving shipping containers to the transport. Readiness verification of the first part has been rigorous and will likely complete today after a final demonstration. There is a question on the safety-class pedigree of the seal-welded cans to withstand the full fire. These are STD-3013 inner cans of the ARIES design. Loading operations may begin early next week, pending resolution of the few remaining open items.

Authorization Basis (AB): Annual updates of nuclear facility ABs have rarely occurred here, and neither LANL nor LASO maintains a complete list of AB documents (site rep weekly 4/23/04). To rectify this, the LANL resumption plan includes a requirement that nuclear facilities have an approved authorization agreement (AA) in place prior to resuming level 3 activities. The AA will include a list of the documents that constitute the AB. Three months ago, LANL proposed to LASO a procedure that could streamline the process of preparing and updating AAs. The site rep understands that this procedure is still waiting action because of confusion on hazard categorization (HC) for some nuclear facilities (e.g., whether the Radioactive Liquid Waste Treatment Facility is now HC-2 or HC-3). Prompt LASO action on both the AA procedure and facility hazard categorization would be beneficial to support resumption activities.