

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 23, 2001

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director

FROM: C. H. Keilers, Jr.

SUBJECT: Los Alamos Report for Week Ending November 23, 2001

LANL Authorization Bases (ABs): This week, DOE, LANL, and the DNFSB staff discussed potential improvements in the AB preparation process (site rep weekly 11/9/01). During the past year, DOE and LANL have been shifting away from a process that relied on the review cycle to inspect in quality to one where quality is built in. This has been a difficult transition for a number of reasons, such as limited qualified personnel, competing resources, and uncertainties on responsibilities and expectations – particularly, for the quality of the final product. Major AB submittals for several facilities (e.g., WETF, TA-55) have been affected by the shift since they were prepared under the old paradigm but reviewed in light of the new one (site rep weekly 10/26/01).

DOE and LANL recently completed a joint review of the AB preparation process and developed recommendations to improve the process. More emphasis is being placed on initial scoping, resource loading, and structured planning for the development of new ABs. Identified needs also include: clear DOE expectations; increased DOE and LANL senior management commitment; improved DOE-LANL communications; clear roles and responsibilities; trained and qualified AB management and technical support; realistic budgeting, staffing, and scheduling; and processes and procedures to develop an approvable document the first time.

DOE and LANL are also recognizing that one key to success may be joint training on a strengthened process for management and analysts. Developing joint DOE-LANL training could assist in both establishing and communicating a common set of expectations, as well as an agreed-upon set of best analytical assumptions and practices for LANL source-terms, facilities, and activities.

Radiography Facility (TA-8-23): LANL is pursuing obtaining an exemption from DOE to conduct two evolutions in TA-8-23 within the next few weeks that are outside the current authorization basis (site rep weekly 11/16/01). The specific evolutions involve combined high explosive and radioactive materials (depleted uranium). In parallel, LANL will perform an Unreviewed Safety Question Determination for this type of operation in the future. DOE and LANL have verbally agreed upon this approach. To support the exemption, LANL will have subject matter experts develop a list of differences between these specific evolutions and those in the AB, will review hazard analyses for other facilities with similar hazards, and will propose a conservative set of controls. DOE and LANL will verify the controls are in place before the evolutions occur.

TA-55 Fire Protection Yard Main Replacement (FPYMR) Project: Progress on the FPYMR Project since last month's ground-breaking has been slow (site rep weekly 10/19/01). The project is intended to improve the system reliability and, per DOE direction, needs to be properly sequenced to minimize periods of increased risk, such as during confinement breach. Trenching is on track, but issues associated with field management, material receipt inspection (e.g., piping gouges), and field testing (e.g., bend-back tests) have slowed progress toward the initial system tie-ins. The situation has senior management attention. The project is developing a recovery schedule to support completing tie-ins and the remaining work in March and July 2002, respectively.