DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 27, 2002

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending September 27, 2002

Burnfield, Contardi, and Jordan were on site this week reviewing the internal dosimetry program, Recommendation 2000-2 status (vital safety systems), and the chlorine dioxide event followup.

Authorization Basis (AB): Last Friday, DOE provided LANL comments on the proposed on-site Transportation Safety Document, which will require its resubmittal (site rep weekly 9/13/02). DOE stated that this package was one of the first in the complex developed to meet the Nuclear Safety Management rule (10 CFR 830, subpart B); that there is little precedence for the document and its associated Technical Safety Requirements (TSRs); and that DOE headquarters also has seen questions from many sites on how to achieve a compliant Transportation Safety Document. That said, the issues raised by DOE appear to be fundamental, involving identification of hazards, derivation of a complete set of controls, quantitative justification of controls, and linkage between accident analysis and TSRs. LANL is revising the document with increased focus on quality and plans to resubmit it shortly.

Plutonium Facility (TA-55): DOE has been reviewing the TA-55 AB upgrade package since April. The site rep understands that the review cycle has been extended for the following reasons: (a) allow a DOE-LANL iteration on the proposed TSRs; (b) allow LANL to complete/evaluate fire suppression hydraulic calculations that may affect TSR setpoints; (c) allow LANL to address DNFSB issues on the new Pu-238 scrap recovery line (Board letter 4/23/02); and (d) allow LANL to improve the Transportation Safety Document. These activities are in process. The need for the fire suppression calculations is driven by issues raised by the staff in December 2001 (site rep weekly 12/21/01). In January, DOE and LANL linked these issues to the AB upgrade submittal, but the issues have since lingered . The Pu-238 scrap recovery line issues are the topic of a separate LANL process hazard analysis, expected now sometime within the next couple of months.

Integrated Safety Management: Last Friday, DOE provided LANL comments on a draft corrective action plan in response to the January liquid chlorine dioxide explosion in a non-nuclear facility (site rep weeklies 1/11/02, 6/28/02, 9/6/02). DOE observed that, while some actions have been taken, a significant length of time has lapsed between the event and the development of the corrective actions. DOE emphasized that the plan needs to capture the full scope of actions required; it needs deliverables that constitute objective evidence; and it must be formally managed and tracked to closure. Several DOE comments indicate that the site-wide implications ought to be considered, which affects nuclear facilities. In discussions with DOE and the staff this week, LANL described the actions being taken by the affected division and at the institutional level. Particularly, LANL has identified several groups that have demonstrated superior performance in Safe Work Practices. LANL is forming a team of working-level managers from those groups to identify opportunities to improve hazard identification, risk categorization, work control, training, and other areas related to the safety of programmatic work. DOE and LANL expect the corrective action plan to be finalized in mid-October.

Critical Experiments Facility (TA-18): Erosion control improvements have been pursued for the Flood Retention Structure, such as downstream gabion baskets; turf matting; and contouring and hydroseeding disturbed areas. Upstream stabilization improvements are scheduled to begin this Fall (e.g., partial spoil pile removal). Concrete core drilling is done, and a report is forthcoming.