

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 26, 2004

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending March 26, 2004

Von Holle was here this week participating in the annual review of the weapons enhanced surveillance program. DeLoach was also here reviewing the NNSA Facility Rep program.

Plutonium Facility (TA-55): Higher priority and increased management attention appear warranted on NNSA and LANL reaching agreement on the scope and schedule of the Type B corrective action plan (CAP). Particularly, NNSA needs to take appropriate and timely action on the judgements of need under federal responsibility and on the LANL proposed CAP. Also, during the last two weeks, LANL has developed a deliberate, resource-loaded schedule leading to start up of the new Pu-238 scrap recovery line in September. There are some details still to be worked out during the next few weeks, such as linkage to the Type B CAP. The schedule does appear to capture key elements, including closure of July 2003 LANL readiness assessment (RA) findings, a technical safety requirement (TSR) revision, a management self-assessment, another LANL RA, and the NNSA RA.

Welding Issues: LANL has self-identified that some welding processes used on site may not have complied with national consensus codes (site rep weekly 1/2/04). Issues include qualification and certification of welders for nuclear safety and other critical systems; weld filler procurement and traceability; qualified weld processes and procedures; code-compliant weld inspections. The scope of this problem is likely large. Last November, LANL visually inspected 90 welds in CMR safety systems and identified 22 welds that did not meet acceptance criteria (e.g., arc strikes, undercut, overlap, lack of fusion, blow-holes, poor workmanship). This was a sampling inspection of fire suppression, ventilation, and ventilation wash-down systems.

For new welds, LANL is close to issuing a site-wide notice to specify proper controls via the new integrated work management system. This will affect new work on systems involving nuclear safety, high pressure, or structural hoisting and rigging. Longer term, LANL intends to implement a compliant welding program via the LANL Engineering Standards Manual. For existing welds, LANL has committed to performing facility and program-specific assessments.

Integrated Safety Management (ISM): The DOE Office of Price-Anderson Enforcement issued their investigation report this week for the TA-55 Pu-238 uptake event (8/5/03), the TA-55 toxic vapor exposure event (9/27/03), and LANL radiological protection program issues. An enforcement conference is scheduled for April 13-14. DOE expects LANL to also be prepared to discuss five other recent events: the mobile crane striking the 13.2 kV overhead line; the CMR facial contamination; LANSCE uncontrolled high neutron radiation area; TA-18 temperature scram design issues; integrated work control confusion on walk-down requirements. LANL has several investigations underway. The events are summarized in site rep weeklies 12/19/03, 1/9/04, 1/16/04, 2/13/04, 3/5/04, 3/12/04.

Emergency Preparedness: This week, LANL conducted its first large-scale drill in the new Emergency Operations Center (EOC), which was declared operational last December. This was a tabletop exercise, simulating a wildfire under weather and dryness conditions similar to those during the Cerro Grande fire (May 2000). Federal and County agencies participated. LANL is preparing for a full exercise in June. The last such exercise here was in June 2002 (site rep weekly 6/14/02).