

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 19, 2002

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending July 19, 2002

The Board and a staff team were on site this week, reviewing the application of safety management standards to high priority defense nuclear projects.

Plutonium Facility (TA-55): The laboratory readiness assessment (RA) was completed this week for the new Pu-238 Scrap Recovery Line. The site rep understands that the RA team identified improvements that are needed in procedures and in quality assurance. The DOE RA is expected to occur in mid-August. Startup is scheduled for September.

LANL has evaluated the recent loss of PF-4 room and corridor ventilation (site rep weekly 7/5/02). The loss occurred when five fan motors tripped during the replacement of a ventilation control system backup power supply. LANL has determined the replacement power supply was defective.

DOE and LANL are exploring the possibility of conducting radiography operations in PF-41. This building was previously designated but never used as the Nuclear Materials Storage Facility (NMSF). It appears that PF-41 may be pursued as a replacement for the current Radiography Facility (TA-8-23) – a Hazard Category 2 facility, located in a 1940s era building, and used for nondestructive testing of high explosive (HE) and nuclear components. Logistically, there are advantages to using PF-41 to radiograph components made in PF-4. At this time, it is unclear whether the scope also includes HE components. The latter would introduce a new, unevaluated hazard inside the fence of TA-55. DOE is discussing the possibilities with the site rep.

Decontamination and Volume Reduction System (DVRS): The DOE RA was completed this week, and the RA report is expected next Friday (site rep weekly 6/21/02). The RA scope covers startup as a radiological facility. After a period of operation, DOE and LANL expect to complete further readiness assessment activities (possibly ORRs) and transition DVRS to Hazard Category 3 and potentially Hazard Category 2. One DOE finding involves clearly demonstrating that the hazard control plans implement the safe work practice requirements (i.e., Integrated Safety Management). Other tentative DOE RA pre-start findings include improving:

- C configuration management (e.g., putting set points in the Facility Design Description)
- C operations formality (e.g., daily pre-op checks on alarms)
- C emergency management (e.g., update pre-fire plans, as well as site maps to show DVRS)
- C fire protection (e.g., install seismic bracing shown on drawings, NFPA 25/72 inspections)
- C worker safety (e.g., consider heat stress factors, Be hazard characterization)

The site rep believes that DVRS startup is important since it addresses risks associated with radioactive waste forms stored in several hundred fiber-glass reinforced plywood boxes. It is equally important to identify the safety systems likely to be needed to support future operations, and then implement appropriate configuration management. To the site rep's knowledge, this has not been done, and DOE and LANL will likely default to administrative controls. DVRS might benefit from preliminary functional classification, similar to other activities discussed (site rep weekly 5/31/02).