

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 5, 2002

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending April 5, 2002

The site rep attended a Standing Management Team meeting at Pantex this week to determine the status of laboratory support for Pantex Operations.

Chlorine Dioxide Event: As of Thursday (4/4/02), LANL has not yet issued the investigation report on the January chlorine dioxide explosion in TA-54 West (site rep weeklies 1/11/02, 3/1/02). The site rep believes that the conclusions may have implications on Safe Work Practices for both nuclear and non-nuclear facilities. Timely corrective actions would then be appropriate since Safe Work Practices are one of LANL's main mechanisms for implementing Integrated Safety Management.

Self-Assessment Process: During the Type A investigation of the March 2000 Pu-238 uptake event, DOE identified a need for a comprehensive review of the LANL self-assessment program. Recently, DOE completed such a review with LANL assistance. DOE concluded that LANL is making progress, but improvements are still needed, particularly in the following areas: senior management awareness of assessment results; management accountability for developing and completing corrective actions; integration of existing assessment systems, including external reviews; and sharing of assessment results. DOE observed that the program now partially meets applicable DOE policy and order requirements. LANL is currently reorganizing the Operations organization and increasing focus on performance assessment. This could provide a path forward for implementing these improvements.

Critical Experiments Facility (TA-18): LANL is installing a missing interlock on Flattop that is described in the current authorization basis but apparently was never installed (site rep weekly 2/15/02). In January, LANL proposed to DOE adding an administrative control instead of installing the interlock, because of questions on the as-built configuration and because of other administrative controls in place that should protect personnel (i.e., CASA evacuation before and during Flattop operation). In mid-March, DOE withheld approval of the proposed administrative control. DOE and LANL have since determined that the interlock could be installed using existing hardware and relays.

Authorization Basis (AB): This week, LANL submitted to DOE, on schedule, the proposed updated AB for the Plutonium Facility (TA-55). DOE action is forthcoming on the proposed ABs for TA-18 and the Weapons Engineering Tritium Facility, submitted in March and January, respectively.

High Pressure Tritium Facility (HPTF): DOE concurred last week with LANL downgrading HPTF in TA-33 from a Hazard Category 2 nuclear facility and removing it from the nuclear facility list, since it has a tritium inventory well below the 1.6 gm upper limit for a radiological facility.

HPTF began operation in 1955 and was used for filling high pressure experimental vessels and for transferring low pressure gas. In 1990, operations were halted because the facility did not meet current DOE requirements, including safety requirements. Recently, LANL has engaged in an extensive effort to deinventory and to offgas remaining systems and components via a hood and a monitored stack. The current tritium inventory is estimated to be about one-third gm, and monitored release rates are about 1 Curie (10^{-4} gm) per day.