

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 1, 2002

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** C. H. Keilers, Jr.  
**SUBJECT:** Los Alamos Report for Week Ending March 1, 2002

**Staff Reviews:** The site rep attended a Standing Management Team meeting at Pantex this week to determine the status of laboratory support for Pantex operations. Boyd, Feldman, Jordan, and Von Holle were at LANL this week reviewing chemical safety. The staff team was briefed on the status of the nearly completed LANL investigation of the chlorine dioxide explosion (site rep weekly 1/11/02). Boyd and Jordan also observed nuclear chemistry research operations in TA-48, and CMR.

**Plutonium Handling Facility (TA-55):** The Fire Protection Yard Main Replacement Project is intended to replace the leaking fire water loop and improve its reliability (site rep weekly 11/23/01). Progress has been slow but deliberate. The construction force began fusing the main body of the first replacement piping section in early February. Last weekend, the first section was successfully hydro-tested. A DOE readiness assessment began this week, focused on tie-in preparations and implementation of controls (e.g., controls to minimize periods of increased risk, such as during a confinement breach). Tie-in of the first section could occur as soon as next Friday (March 8<sup>th</sup>), following the readiness assessment and a series of flushes.

**Weapons Engineering Tritium Facility (WETF):** DOE review of the LANL proposed WETF safety basis continues (site rep weekly 1/25/02). The staff is reviewing it in parallel. LANL identified the safety class features as the facility structure, tritium containment vessels, and Pu-238 sealed sources (used for calibrating calorimetry). The proposed safety significant features include: tritium monitoring, gas containment, gas handling, and waste treatment; fire protection; environmental chamber over-temperature protection; glovebox inert and oxygen monitoring; and the uninterruptible power supply for monitoring systems.

**Decontamination and Volume Reduction System (DVRS):** This week, the staff (Boyd, Jordan, Keilers) toured DVRS and discussed preparations to first start it up as a radiological facility and later transition to a Hazard Category 3 (site rep weekly 1/25/02). The staff learned that shear-bailer operation could occur prior to that transition. Also, the facility is pursuing the possibility of using glovebox decontamination processes developed and used at Rocky Flats.

DVRS will require manually intensive radiological operations and warrants a rigorous startup process. A facility management self-assessment (MSA) began on January 25<sup>th</sup>. The facility manager prudently suspended it a week later due to equipment and procedure problems. The MSA is now expected to restart in mid-March and will be followed by LANL and DOE readiness assessments. Because of the unique startup strategy being pursued, the DOE Site Office Manager (acting) is the startup approval authority.

**Critical Experiments Facility (TA-18):** LANL is poised to begin a readiness assessment next week for relocated storage of Special Nuclear Material, subject to resolution of seismic robustness questions and DOE approval of the hazard analysis.