

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 21, 2000

TO: K. Fortenberry, Technical Director
FROM: M. Sautman, Hanford Site Representative
SUBJ: Activity Report for the Week Ending July 21, 2000

Steve Stokes was on annual leave this week.

A. Fire Protection: Charles Coones and the Site Rep conducted an extensive review of the Department of Energy-Richland (DOE-RL) and contractor fire protection programs, the Hanford Fire Department, and the implementation of fire protection controls at most of the Fluor Hanford and Bechtel Hanford nuclear facilities. Among the issues identified were the lack of DOE-RL and contractor program assessments, the amount of field presence by DOE-RL fire protection staff, and specific issues with some of the facility fire suppression systems and combustible control programs. Another staff concern is whether an accident involving the storage of flammable transuranic (TRU) waste or unvented TRU waste drums could result in an unfiltered release of plutonium. There are also fire protection issues at the Plutonium Finishing Plant (PFP) associated with 3013 can storage, glovebox combustible loads, and polycube stabilization that will require additional staff review in the future. (1-C)

B. 222-S Analytical Laboratory: The Site Rep observed the transfer of a neutron source to the 222-S Californium Activation Analysis Facility (CAAF). The new 23 Ci Cf-252 source is extremely radioactive (1082 rem/hr fast neutron, 93 rem/hr gamma at 30 cm) and will be used for neutron activation of tank wastes. The neutron source capsule was drawn out of a 4.5 ton transportation cask and moved through a transfer tube to an underground storage position and finally stored in a dry well inside the CAAF irradiation tank. Movement was by a manual crank on a continuous cable with a magnetic end effector. Several mockups and dry runs had been conducted prior to the evolution and worker involvement was significant. This planning resulted in a good pre-job brief and a smooth transfer. (1-C)

C. Interactions with the State: Mr. Sautman met with the Washington Department of Ecology to discuss the status of Recommendation 94-1, residue characterization and permitting, and 224-T. There is the possibility that issues associated with hazardous residues (i.e., ash and sand slag and crucible) could delay the start of residue repacking/processing if they are not resolved in a timely fashion. (3-A)

cc: Board Members