

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 26, 2000

TO: K. Fortenberry, Technical Director

FROM: M. Sautman and S. Stokes, Hanford Site Representatives

SUBJ: Activity Report for the Week Ending May 26, 2000

A. Plutonium Finishing Plant (PFP): After declaring readiness to start handling plutonium metal items on April 28, the technical staff and the Department of Energy (DOE) were very skeptical about PFP's intention to spend until June 30 developing a disposition plan. The staff and DOE strongly believed that the items of most concern could be addressed much sooner. PFP was able to put together a more aggressive schedule this week and start implementing it. PFP now expects to have the higher risk items addressed by late June. Five items will be thermally stabilized and eight items will be brushed and repacked. The two items with external contamination were repacked this week. The remaining 20 items with smaller weight gains will undergo surveillance at a frequency ranging between 2 weeks and 6 months. The first weight gain item was not able to be fully oxidized during two furnace cycles. About 20% of the metal formed nuggets that looked like slag. These are undergoing analysis to see if impurities in the ingot or boat may have caused a low-melting eutectic to be formed. The Site Rep observed the opening of the first plastic item. Rather than being in direct contact with plastic as expected, the ingot was tightly wrapped in aluminum foil. An outer plastic bag had mostly melted from decay heat and had pooled at the bottom. The ingot was in relatively good condition, probably because the foil had significantly reduced the radiolysis of the plastic. PFP started thermally stabilizing this item Thursday. The first two cycles will only go to 550°C to see if this avoids the reaction seen with the previous item. PFP intends to handle two more items next Tuesday. (3-A)

B. Facility Representative Conference: Mr. Sautman attended the Facility Representatives Annual Workshop held May 16-18 and sat on an operations oversight panel. The workshop was attended by several senior managers including Bill Brumley, Leah Dever, Jerry Lyle, Lloyd Piper, Roy Shepens, and Mike Weis. Ben Harp, from the Office of River Protection, was named Facility Representative of the Year for his efforts with a high-level radioactive waste spill, leading a review of contractor readiness to use a new transfer system, and identifying that the availability of safety equipment had been reduced an order of magnitude than what was assumed. A former facility representative from the Y-12 Plant, Ken Ivey, received a special award from the Secretary for his facility representative achievements. As expected, career progression was a popular topic and a couple of former facility representatives and senior managers provided frank, practical advice. There were other presentations by the Safety Management Implementation Team director and DOE's leads for accident investigations, the lessons learned program, and readiness reviews. Overall, the workshop was well run. One possible area for improvement might be having the facility representatives provide input to about common problems seen in the field. (1-B)

cc: Board members