

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 27, 2000

TO: K. Fortenberry, Technical Director
FROM: M. Sautman, Hanford Site Representative
SUBJECT: Activity Report for the Week Ending December 29, 2000

Mr. Grover was on leave this week. Mr. Sautman worked the first half of the week.

Plutonium Finishing Plant (PFP): PFP personnel have completed stabilizing and/or repacking into bagless transfer system cans all of the plutonium metal items that were under enhanced surveillance due to high weight gains. So far this fiscal year, 19% of the metal items have self-ignited after their cans were opened.

PFP is proposing dividing up their alloy inventory into three categories. The first group (~35% of the items) consists of richer alloys (mostly Pu-U alloys) that would be placed into 3013 cans. The second category (~25%) consists of leaner Pu-Al alloy fuel plates that would be placed into pipe overpack containers and shipped to the Waste Isolation Pilot Plant (WIPP). The third category (~40%) consists of alloys that would also be placed into pipe overpack containers and disposed at WIPP. This category consists of a hodgepodge of items, often with little characterization information, such as turnings packed in oil and a grinding wheel contaminated with alloys. PFP intends to disposition the first 2 categories by June 2001 to meet the alloy implementation plan milestone. However, PFP wants to reclassify the last category of material as residues, which do not have to be repacked until April 2004. The disposition path for many of these items is uncertain. Some items may have to be treated before they can be repacked. The Site Rep will be reviewing the items in this third category in more detail to determine if this reclassification is appropriate for some or all items. (III-A)

233-S: Workers have twice received high lapel air sampler readings while disassembling a highly contaminated neutron monitor (up to 25 million dpm alpha/100 cm²). However, based on coworker lapel and nearby air monitor readings, it appears that the high lapel readings were not due to an airborne release, but rather workers knocking loose contamination down on their samplers. Work on the neutron monitor has been put on hold until a better approach for disassembling the monitor can be developed.

Preliminary nondestructive assay results of the L-18 process vessel are reportedly showing considerably lower than analyzed quantities of plutonium. Workers also found some white powder (likely nitrate/nitrite salts) in another vessel. (III-B)

cc: Board members