DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 6, 2001

TO: J. K. Fortenberry, Technical Director
FROM: D. F. Owen, RFETS Site Representative
SUBJECT: RFETS Activity Report for the Week Ending April 6, 2001

Plutonium Stabilization and Packaging System (PuSPS). Building 371 declared PuSPS readiness and the Kaiser-Hill Operational Readiness Review (ORR) was started on Wednesday and is expected to be completed by April 11th. Pending the results of the Kaiser-Hill ORR, the DOE ORR is now projected to start on April 16th. (3-A)

Building 371/374 Work Control. On Thursday, a Building 374 supervisor sustained a broken arm when the hinged lid of a potassium hydroxide supply tank he was inspecting was being closed. This inspection was being done to investigate an unexpected tank level indication. DOE-RFFO and Building 371/374 management are continuing to investigate. This may be another example adding to the recent series of problems with work planning and work control in Building 371/374 (see last week's site rep. report). (1-C)

Response to Board's Letter of March 23, 2001. This week, DOE-RFFO formally requested that Kaiser-Hill work with DOE-RFFO personnel to resolve the issues raised in the Board's March 23rd letter regarding safety management during recent thermal stabilization operations in Building 707. The site rep. has discussed the letter with DOE-RFFO and Kaiser-Hill management. They appear to recognize that the safety management observations forwarded by the Board could have site-wide application and are not limiting their efforts to either thermal stabilization activities or Building 707. DOE-RFFO has indicated their intention to provide a response to DOE Headquarters by early May. (1-C)

Tank Decontamination Technology. As previously reported, Kaiser-Hill is working to deploy a system to decontaminate stainless steel tanks in Building 371 using a cerium acid solution. This week, the site rep. observed one of two demonstrations of the application of the solution in an uncontaminated tank in Building 374. The cerium solution is mixed with low pressure steam, passed into the tank and through a nozzle to coat the inner tank surface and perform the intended surface etching. Following the surface etching, ferrous sulfate solution is added to neutralize the spent cerium solution in the bottom of the tank. Results of the first demonstration indicate that there was relatively uniform coating of the inner tank surfaces and adequate etching of the surfaces (about 3 microns on average per application) to provide effective tank decontamination. Data from the second demonstration is being evaluated. Based on these demonstrations, Kaiser-Hill intends to proceed with use of the system on contaminated tanks in the near future. (3-B)

cc:
Board Members