

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 1, 1999

TO: G. W. Cunningham, Technical Director

FROM: R. Arcaro, Hanford Site Representative
M. Sautman Hanford Site Representative

SUBJ: Activity Report for the Week Ending October 1, 1999

A. Polycube Stabilization at the Plutonium Finishing Plant: Mr. Sautman observed a meeting attended by PFP, PNNL, LANL, DOE-RL, and DOE-HQ personnel to discuss testing results and the path forward for furnace oxidation of polycubes. PFP is focusing on furnace oxidation and will not spend any more resources on the pyrolysis units. LANL plans to ship the finished pyrolysis units to Hanford, possibly for use at PNNL or for other 94-1 stabilization work in the complex. The participants generated a list of parameters (e.g., surface area and temperature) to be tested over the next 60 days to address safety concerns and optimize throughput. This list should address most of the technical staff's questions. (3-A)

B. Office of River Protection Integrated Safety Management: The tank farms Final Safety Analysis Report (FSAR) was approved in March 1999. Lockheed Martin Hanford Company expects to transition to the FSAR from the current Basis for Interim Operations in October 1999. Since the configuration of the FSAR was maintained current with the BIO since March, the initial transition, including procedure changes, training, and implementation of some additional controls, is expected to occur smoothly. However, incorporating over 150 changes to the FSAR directed by DOE in its Safety Evaluation Report will occur from now until well into 2001. The majority of the directed changes will result in the optimization of controls and clarify operational requirements. The Site Reps will continue their review of the authorization basis for the tank farms to ensure the large number of changes are appropriately prioritized based on their impact on safety.

Lockheed Martin Hanford Company (LMHC) will transition to a prime contractor under the Office of River Protection (ORP) this fiscal year. The new contract incorporates the DEAR clauses that refer to Integrated Safety Management (970.5204-2, 970.5204-78, and 970-5204-86). DOE-ORP expects that LMHC will submit a new ISM System Description and execute a new Authorization Agreement by January 2000. (1-C)

C. River Protection Project (formerly Tank Waste Remediation System): Mr. Arcaro attended a topical meeting between BNFL and the DOE Regulatory Unit on the explosive hazards of the privatized facilities being designed by BNFL. The exchange of information showed significant consideration of safety issues during the design stage. Although also noticed by some individuals supporting the Reg Unit, it appeared that safety-related studies and other information developed by the non-privatized contractor could prevent some duplication of effort. For example, much effort was put into showing that the head spaces of existing and future storage tanks would remain well mixed. Similar studies were performed by LMHC in support of Recommendation 93-5. (3-A)

cc: Board members