

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 22, 1999

TO: G. W. Cunningham, Technical Director

FROM: R. Arcaro and M. Sautman, Hanford Site Representatives

SUBJ: Activity Report for the Week Ending October 22, 1999

A. Recommendation 94-1: The technical staff met with DOE (HQ and RL) and the contractor to discuss DOE's proposed modifications to the Rec. 94-1 Implementation Plan. PFP has implemented or is close to implementing some initiatives that will accelerate stabilization. However, the proposed milestones do not reflect this schedule acceleration because they are based on the Integrated Project Management Plan (IPMP) developed last April. Examples of this include:

- the thermal stabilization charge size was quadrupled ahead of schedule,
- the prototype vertical denitration calciner is operating, but is not credited, and
- at Klein's direction, the startup of 3 more furnaces is to be accelerated from June to January.

Although the IPMP is supposed to be a living document, PFP does not plan to update the IPMP to reflect these changes until March. Rather than having milestones that reflect some sense of urgency (but are still achievable), DOE wants milestones that are relatively easy to meet and rely on stretch fees to drive acceleration. The staff also believes it is premature to accept a 19-month delay for completing polycube stabilization that is based on pyrolysis. Testing results for direct oxidation look very promising and should reduce the time to complete stabilization. It is probably prudent to wait until the throughput rates for direct oxidation are determined before accepting a delay that could be reduced. Since 4 -5 new processing lines are scheduled to start operations over the next 12 months, the staff also believes that start milestones need to be established to ensure that the proper resources are made available to support these startups. DOE strongly resisted many of these positions, but agreed to consider them in a revised proposal. (3-A)

B. Tank 101-SY Level Rise: The LMHC Plant Review Committee (PRC) requested that additional specificity be added to controls required by the authorization basis for the transfer and back dilution of tank 101-SY. In particular, the PRC requested that specific limits on water addition be added to the safety basis. (Previously, the control had stated simply that these limits must be determined prior to back dilution.) LMHC has delayed the start of their Readiness Assessment (RA) pending the incorporation of the comments from the PRC. The transfer is now scheduled for the second week in November. Waste level in 101-SY has decreased about an inch in the last few weeks, consistent with the small measured gas releases over that time period.

The DOE-RL RA of specific areas of the project will occur as the contractor declares that those areas are ready for operations. One of the major areas of review is the authorization basis (AB). Given the complex dynamics of the tank waste and the effects of the transfer and dilution, a credible independent review of the AB may be more difficult than the RA team is planning. Mr. Arcaro informed the DOE Restart Approval Authority (Sidpara) that more time and additional resources may be necessary for this critical review area.

C. Spent Nuclear Fuel Project: DOE-RL has determined that DOE Order 425.1, Start-up and Restart of Nuclear Facilities, is applicable to the Phased Start-up Initiative. After readiness is verified by the contractor for the initial operation of the Fuel Retrieval and Integrated Water Treatment Systems with actual spent nuclear fuel, DOE will perform an appropriately graded RA. DOE-RL should be able to apply lessons learned from a similarly graded RA for the 101-SY transfer.

cc: Board members