

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 18, 1997

TO: G. W. Cunningham, Technical Director
FROM: R.F. Warther, M.T. Sautman
SUBJECT: RFETS Activity Report for Week Ending April 18, 1997

Recommendation 94-3. Farid Bamdad, Joel Blackman and Roy Kasdorf were on site during part of the week to review implementation of Recommendation 94-3. Summary comments are:

1. Senior management for RFFO (Klein) and K-H (Card) have taken a strong position in 94-3.
2. K-H has assigned a single point of contact and an organizational structure that should meet the intent of Recommendation 94-3.
3. The existing basis for continued operation of B371 (1980's SAR) is partially demonstrable by the contractor, though some deficiencies exist.
4. Neither K-H nor RFFO have backed off on commitments to complete the priority upgrades to B371. The December 31 date is not impossible to meet, but is in jeopardy.
5. No priority upgrade design packages are complete. Therefore, it is difficult to determine the degree of completion of priority upgrades. The more difficult priority upgrades packages are not expected to be complete at this time, but Board Staff expected that some of the less complicated jobs would be complete.
6. The BIO is significantly improved from January. The Staff determined that the previous BIO control set was inadequate and reported this in the January 1997 Recommendation 94-3 trip report. Based on the fact that the BIO is not yet complete, the Board Staff has no issues. However, a detailed review of the BIO by the Board Staff will be conducted before final delivery from K-H to RFFO which is scheduled for June 10.

The staff will provide a complete trip report to the Board in the week of 4/21.

Solutions. The last of the plutonium solutions from the six Category B tanks were processed through the Caustic Waste Treatment System. K-H is proposing the following modifications to the Recommendation 94-1 Implementation Plan as a result of their recent strategy change.

Current Milestone	Proposed Milestone
B771-Start draining 5 high-level tanks and begin oxalate precipitation by 11/97.	B771-Start draining 4 high-level tanks and begin processing by 9/97. <i>Fifth tank has been drained.</i>
New	B771-Complete draining 4 high-level tanks by 12/97
B771-Complete processing liquids from high level tanks and bottles by 5/98	B371/771-Complete processing liquid from B771 tanks and bottles in B371 by 4/98.
	B771-Start tap/draining rooms/systems by 1/98.
B771-Complete <i>processing</i> all liquids in B771 by 9/98	B771-Complete <i>removal</i> of all liquids in B771 by 9/98
B371-Complete draining 2 criticality line tanks by 6/97.	B371-Complete draining 1st criticality line tank by 6/97 and 2nd tank by 11/97.
B371-Complete processing liquids form 8 tanks by 6/97.	B371-Complete processing liquids from the 6 Cat. B tanks by 6/97. <i>Complete.</i>

New	B371-Start tap/draining rooms/systems by 6/98
B371-Complete processing all liquids in building by 6/99.	B371-Complete processing all liquids in B371 and B771 by 6/99.

Most of the proposed changes appear reasonable. although the addition of milestones for starting tap and drain is good, these dates could probably be accelerated. When asked why it will take 14 months before tapping can begin in B371, the reply was that this was the latest they could start and still meet the June 1999 milestone rather than when they could be ready.

The Site Reps were briefed on the status of the Tank Trade Study which will identify disposition recommendations for the 268 tanks and miles of piping in B771. alternatives being considered include the use of glovebags, portable gloveboxes, Permacons, tents, and existing, new, or mobile size reduction facilities. Decontamination methods being considered include none, acid rinse, CO2 pellets, and sandblasting. Raschig rings could be removed by hand or vacuum, left in place, decontaminated, recycled, or vitrified. Because of differences in sizes, contamination, and tank types, there will be a series of recommendations to address the various subsets. The Site Reps have provided the technical staff with additional information for their review. Final recommendations are to be ready by the end of May.

Emergency Preparedness The site conducted its annual Emergency Preparedness exercise on April 17. Two scenarios were conducted. First, a nitric acid leak from a truck accident was simulated to have occurred behind B371. Second, a propane gas cylinder explosion in a B371 lab with attendant injuries was simulated to take place. The Site Reps were stationed at the scene and in the EOC. From the scene, the Site Reps observed that the site responded to the casualties quickly, but site personnel did not aggressively take control at the scene. From the EOC, the Site Reps observed that it took a long time to get good information from the Incident Command Post (scene), and therefore the Crisis Manager was slow to assume control of the casualty. Site personnel evaluated the exercise as satisfactory during the hot wash afterward. A detailed grade has not been provided. The grade associated with the exercise is important to RFFO and K-H in part because satisfactory completion of 95% of the exercise objectives is associated with a K-H performance measure.

Meetings with EPA and CDPHE. The Site Reps met with staff from the CDPHE and EPA to discuss more detailed implementation of the Memorandum of Understanding. The meeting was precipitated by several incidences where RFFO and K-H personnel believed that DNFSB, CDPHE and EPA goals and objectives may be inconsistent. This was the best discussion to date among the three parties. All three agreed that hazard and risk reduction were most important, and that within the bounds of their respective enabling statutes, would pursue removal of hazardous materials from the site, or placement in stable configurations, containers and buildings. Additionally all three parties came prepared with lists of specific priority issues, and general agreement of which organization was lead and organization which was secondary responsible agency.

cc: Board Members