

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 8, 1999

TO: G. W. Cunningham, Technical Director

FROM: M. T. Sautman

SUBJECT: RFETS Activity Report for Week Ending January 8, 1999

SSOC Management. The Site Rep briefly met Dr. Carl Cox who will become the new president of SSOC on January 11. Dr. Cox has been the General Manager of the Government Technology Services Division since 1995 and was the General Manager of the Waste Isolation Division in Carlsbad before that. Roger Bacon will be returning home to pursue other interests. The Site Rep also met with George Jackson, the new SSOC Chief Operating Officer, to introduce himself and discuss Board activities and concerns at RFETS. One of Mr. Jackson's highest priorities is to ensure that SSOC meets Recommendation 94-1 milestones and related performance measures.

Lock Out/Tag Out (LO/TO). As discussed in the December 11 report, tap and drain activities on the B771 aluminum chloride system were halted and the foreman stripped of his position when workers did not LO/TO a pressurized system. In late December, work resumed with a new foreman. Unfortunately, work was terminated again when workers removed a nipple from a pressurized air line (~25 psia) inside a glovebox. The glovebox lost its negative differential pressure and the gloves were reportedly slightly inflated. No contamination was released. Workers did not believe a LO/TO was necessary because they incorrectly invoked an exemption that was only supposed to apply to machine shop operations. In addition, they did not expect the system to be pressurized.

Since this was the fourth LO/TO incident in two months, Steve Polston, (K-H Exec. VP and COO) issued a standing order establishing compensatory LO/TO requirements until site procedures can be modified. The standing order requires all electrical systems to be de-energized prior to work unless specific conditions are met that make working on an energized electrical system unavoidable. It also defines when double valve isolation is required on pressurized systems. Furthermore, it requires that the K-H COO or principal subcontractor President approve all energized work or use of only single valve isolation when double valve isolation would normally be required.

Recommendation 94-1. The Site Rep is concerned that classified plutonium at RFETS is not covered by any milestones in the recently submitted Implementation Plan. RFETS has a sizeable amount of plutonium metal that has classified shapes. This material will not be packaged into 3013 containers before shipment to SRS. After declassification at SRS, the plutonium is to be put into 3013 containers. While the original RFETS milestones applied to all plutonium metal, the revised RFETS milestone for repackaging metal into 3013 cans specifically excludes classified metal. In addition, the SRS milestone for repackaging metal only applies to that metal present during their May

1994 inventory. The Site Rep believes that either one of the milestones needs to be reworded or a new milestone written to make sure this metal is repacked into 3013 cans by May 2002.

Although RFETS has started shipping SS&C residues to SRS in 9965 shipping containers, continuing delays with the re-certification of the 9975 shipping container will severely impact RFETS' ability to meet the SS&C shipping schedule (and thus their 94-1 milestone). RFFO has sent several letters to EM-1 and EM-60 stressing the need for EM-76 to re-certify the 9975 to allow shipments of SS&C and fluoride residues. This issue was also highlighted in the Board's December 8, 1997 letter to the Secretary about the need for DOE-HQ integration of Recommendation 94-1 activities. However, it appears that re-certification will be delayed for an undefined period of time. Because of the limited number of 9965 shipping containers, RFFO expects that they will be able to ship only 1/3 of the number of containers initially planned until the 9975 is available. In addition, the low curie content allowed by the 9965 container will not allow any high plutonium concentration SS&C and fluoride residues to be shipped until the 9975 is re-certified. The Site Rep is being briefed on the outstanding technical issues and will be able to discuss this in more detail during his visit to Washington, D.C. later this month.

As discussed in several reports, it is increasingly unlikely that the June 1999 milestone for completing tap and drain activities in B371 will be met. Since many pipes only contain water or uncontaminated reagents, the Site Rep has previously suggested to K-H that draining of the known actinide solutions should be the main priority. However, K-H maintained that they would meet the milestone and did not consider this suggestion. Now that this position is increasingly hard to defend, SSOC is working on a proposal that would focus tap and drain efforts on the process lines so all the actinide solutions would be drained by the end of June. The remaining piping would then be drained. The technical staff supports this proposal if they have a basis for determining which pipes contain actinide solutions and which do not.

cc: Board members