

# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 14, 1997

**TO:** G. W. Cunningham, Technical Director  
**FROM:** R.F. Warther, M.T. Sautman  
**SUBJECT:** RFETS Activity Report for Week Ending March 14, 1997

**Recommendation 94-1** Hydroxide precipitation in B771 was completed Friday, two weeks before the Implementation Plan due date. Completing this task ahead of schedule was even more impressive since SSOC was 75 percent behind schedule at the beginning of the year. A total of 306 liters of uranium and plutonium solutions were processed.

Last week, senior RFFO and SSOC managers visited LANL to review residue processing technologies. Several concerns were identified with the technical maturity of some processes considered for use at RFETS, especially salt distillation. Most of these concerns were described in an attachment to the weekly report two weeks ago. Keith Klein has directed his staff to reexamine RFFO's prior decisions on salt processing. He intends on receiving a brief from RFFO and K-H personnel on Wednesday 3/19 to determine which technologies should be used at RFETS to stabilize many of the residues.

**Recommendation 95-2 and Work Control** Safe Sites of Colorado is planning to partially decontaminate room 3559 in Building 371. This is one of the "infinity rooms" at the site. The plans are to reduce the DAC levels from over 100,000 (already complete) to less than 50 so that personnel can drain tanks using full face respirators and double anti-C's rather than more protective clothing. Current plans are to use 3000 psig water at 3.5 to four gpm and use a 45 degree or 60 degree nozzle with shepherd's crook extension to decontaminate the 18 ft. X 24 ft. X 24 ft. room and equipment. The work will be conducted under the controls of an operations order. The Site Reps and staff discussed this job in some detail to ensure the controls and process are adequate. The two major concerns with this activity are that the high pressure water stream will (1) present industrial hazards to the worker that may not have adequate controls in the ops order, and (2) that use of high pressure water may result in a spread of contamination, not a containment of contamination. The operations order and attendant information will be reviewed by the Board staff during the week of 3/17.

At a more fundamental level, the Site Reps are concerned that two of the more hazardous D&D activities conducted at the site to date (Glovebox A110 in B707 and Room 3559 decon in B371) have been planned with little review from RFFO personnel until brought to their attention by the Site Reps and staff. Furthermore, it is not clear that these jobs have undergone a rigorous hazards assessment in part because they were perceived as small jobs with limited scope.

**Vaults** During a walkdown of all the vaults in B371, two issues were identified. There is a posted restriction that no combustibles are to be stored within 12 feet of the vault because the door for one vault is not fire rated. However, for the last several weeks, wooden scaffolding and ladders have been kept both inside and outside the vault door. Although the wood is fire retardant, the nuclear safety and fire protection personnel who instituted the restriction stated that all combustibles are prohibited, even fire retardant material. RFFO personnel are now working with building management to correct the situation.

Second, coal tar pitch is leaking into two sub-basement vaults from several holes in the walls. Several puddles of tar were on the vault floor including two puddles in contact with shipping drums containing pits or other SNM product. There is a layer of tar between the structural slab and a topping slab to prevent water intrusion. The weight of the building is causing the tar to ooze out at construction joints. Since the tar is combustible

(ignition temperature is 905-F), building management agreed to clean up the tar on the vault floor and drums.

**Recommendation 94-3** RFFO support service contractors completed their review of the implementation of Recommendation 94-3. A draft report was provided to the Board staff (Kasdorf and Blackman). According to the report, many of the upgrades scheduled to be implemented may not be completed on time without a significant increase in K-H's level of effort. Additionally, a systematic approach to fully scope many of the upgrades suggested in previous 94-3 deliverables is not evident. The staff intends to brief the Board to provide more details during the week of 3/17.

**D&D Privatization** The Site Reps met with the K-H manager responsible for privatization of D&D at RFETS. The manager stated that Building 779 would not be privatized immediately because the building had not been fully characterized and the chance of a mistake that results in an incident associated with a worker or co-located worker is too high. He further stated that K-H did not plan to privatize work on buildings that required significant plutonium decontamination at this time. Most decontamination would be accomplished by SSOC or RMRS. Plans are proceeding with privatization of B886 D&D. K-H hopes to award a contract for this effort in about one year. K-H is also considering an effort to privatize D&D of Building 123, the current medical building at RFETS and one of the oldest buildings at the site. This building is not contaminated, although it does contain a very small amount of low level waste. Part of the rationale for privatizing this building is to prove that a contract can be managed involving removal of low level waste material.

**Interactions with the Public - Rocky Flats Cleanup Agreement (RFCA)** The Site Representatives attended a meeting among EPA, CDPHE, RFFO and K-H personnel to discuss additional Environmental Restoration (ER) milestones to be added to the RFCA and their potential impact on Recommendation 94-1 milestones. EPA and CDPHE had requested \$20 million be added to the ER budget, and that regulatory milestones be established for FY98. This included ER work for the 903 pad. RFFO and K-H ER management responded by stating that an allocation of \$20 million to ER would adversely affect Recommendation 94-1 residue milestones, and proposed a \$10 million allocation to ER activities. The meeting ended with an agreement that the CDPHE and EPA would consider the RFFO/K-H counterproposal. The Site Representatives followed this meeting up with discussions with the Deputy Manager for RFFO. He stated that RFFO and K-H executive management did not intend to allow ER work to adversely affect residue stabilization, although they did intend to maintain some ER capability. RFFO is pursuing two basic options. First, funding could be obtained from an alternate source. Second, RFFO and K-H could attempt to educate CDPHE on the risks addressed by ER work versus the risks of not stabilizing Pu. At this time, neither RFFO nor K-H have fully determined how this will be resolved.

cc: Board Members