

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 5, 1999

**TO:** G. W. Cunningham, Technical Director

**FROM:** M. T. Sautman

**SUBJECT:** RFETS Activity Report for Week Ending February 5, 1999

**B779 Contaminated Wound.** On Tuesday, workers were size reducing furnaces with a port-a-band saw in one of the "Am boxes" in B779. The size reduction was being performed in a glovebox still connected to the ventilation system because of the amount of Am-241 holdup in this glovebox and its potential impact on waste packaging. While working in the gloves, one of the workers accidentally scraped off a scab (from an earlier injury) and started bleeding. He and the forman exited the room and went to medical. The remaining worker continued sawing in the room. He had finished cutting one item and was moving the saw to another location. His right hand was on the handle with his index finger on the trigger. His left hand was placed underneath the saw to support it. While he was moving the saw, his finger accidentally pressed down on the trigger. As the saw started, it pulled his left hand into the blade, cutting through the 30-mil glove and lacerating his left index finger down to the bone. He was transported to the on-site medical facility for decontamination. The initial skin contamination was 10,000 dpm. After several decontamination attempts, this was reduced to non-detectable using survey instruments. A wound count indicated 41 nCi left in the wound which was decontaminated to 30.5 nCi. The worker then consented to having DTPA, a chelating agent, administered. At St. Anthony's Hospital, additional tissue was removed to facilitate healing. This reduced the contamination to 0.25 nCi Pu and 0.65 nCi Am. The worker will be monitored for several months with additional wound counts, a lung count, and bioassay.

Power tool work was stopped in B771 and B779 until the workers had been briefed on power tool hazards. The hazards analysis is being re-evaluated. In addition, they are evaluating the use of Kevlar gloves and possibly installing safety switches on power tools. The K-H RadCon Manager believes that as long as workers continue to use sharp tools, there will be an unacceptably high rate of worker injuries. Therefore, K-H has committed to make the necessary authorization basis changes to allow the use of hand-held plasma arcs by April. In addition, they want to start using robotics in a size reduction facility by November.

**Oral Boards.** The Site Rep observed Configuration Control Authority (i.e., a shift manager) oral boards for B771 and B707. The conduct, content, and grading of oral boards in B771 continue to be the weakest on-site. The questions are not very challenging, leading questions are asked when information is not provided, and expectations for accident scenarios are minimal. The integrity of the secret ballot afterwards is compromised by having superiors tell their subordinates their opinion of the candidate's performance prior to the vote. Board member discussion of the responses mostly attempt to justify passing the candidate rather than identifying weaknesses. Another concern is that

the effectiveness of having a senior subcontractor manager on the Board is becoming questionable because the recent reorganization is likely to allow individuals with little building or operational experience to fill this position. These concerns have been discussed with the RFFO and K-H training leads. As a result, the K-H training manager will be issuing good guidelines for the makeup, conduct, and grading of oral boards, including allowing K-H to have a voting member.

**Meeting with Steelworkers' Union.** The Site Rep met with Ted Tegeler, the Joint Company/Union Safety Committee Co-Chairman and the Steelworkers' Chief Safety Officer to discuss Board worker protection initiatives related to deactivation and decommissioning as well as Steelworkers' concerns. Mr. Tegeler provided good feedback on a variety of engineered controls being considered. While there are some differences of opinions over the benefits of some proposed controls, there was agreement on many ideas. In particular, both parties agreed on the importance of using mockups to work out potential problems and train the workers beforehand. The Site Rep also invited Mr. Tegeler to an upcoming technical staff review of worker protection and radiological engineering.

**Citizens Advisory Board Presentation.** The Site Rep gave a quarterly update on Board activities at RFETS to the Citizens Advisory Board Thursday night. A staffer from Rep. Udall's office was present during the presentation. The Site Rep answered questions concerning Year 2000 issues at RFETS, the Board's report on external regulation, and the potential impact to RFETS from delays in constructing the Actinide Processing and Storage Facility at SRS.

cc: Board members