DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 5, 2010

TO: T. J. Dwyer, Technical Director **FROM:** M. T. Sautman, Site Representative

SUBJECT: Savannah River Site Weekly Report for Week Ending November 5, 2010

H-Canyon: After erecting a hut in the Hot Gang Valve Corridor (a contamination area), a construction worker was found to have 200,000 dpm β - γ on his modesty clothing and 2000 – 10,000 dpm β - γ on his back, arm, hair, and eyebrow. The hut was being installed to support work around a contaminated nozzle. Work planning, control, and execution were poor. The scope of work did not reflect the higher potential for contamination in this area nor the need to remove a leak collection device (LCD) beforehand. The safe work permit said little beyond "radiological material, area, hazard involved." An oncoming shift released the work without understanding it involved working in elevated areas not routinely surveyed. No radiological protection department inspectors were present although the radiation work permit required their coverage when working above seven feet. Although the LCD was surveyed as clean before it was removed two days earlier, it was later found to be highly contaminated (smeared 8 mrad/hr β - γ) and reading 394 mrem/hr extremity. After investigating this and other nearby contaminated equipment (e.g., laundry bag reading 60 mrem/hr contact), the suspicion is that the LCD was or became highly contaminated and this was the source of the contamination that the construction worker encountered.

Oral Boards: The site rep has observed 10 SRNS and SRR oral boards. Only one board was unacceptable (see 1/29/10 report). The site rep had the following observations:

- The breadth and depth of oral boards vary widely. Expectations could be better defined.
- Better upfront definition of acceptable answer could improve the consistency of question grading.
- Boards need to focus more on integrating knowledge and management versus memorization.
- Additional guidance could clarify what triggers a board failure or need for remedial work.
- Question banks are not always meeting their objective and some need updating.

Solid Waste Management Facility: Recently, workers identified that a transuranic waste drum was not properly decontaminated before being removed from Pad 16 (see 7/30/10 report). DOE also discovered that two drums, including one which did not meet structural integrity requirements, had been moved without the facility manager's authorization. Management is now increasing the rigor of removing drums.

SRNS Budget: The site reps met with DOE-SR and SRNS to discuss fiscal year 2011 impacts:

- A DOE-EM team recommended closing the six highest priority Rec. 2004-2 gap groups at EM sites. Five of these involved SRS laboratories. No funding is available for closing the four high priority Savannah River National Laboratory (SRNL) gap groups (priorities #1, 3-4, and 6). Ironically, the design package to close five individual gaps at SRNL is not only complete, but the HEPA filter housing, 2 exhauster fans with automatic dampers, and fan controls/motor starters have been sitting at SRS since 2006, but not installed due to lack of funds. The design and installation of ventilation upgrades at F/H Laboratory is also currently unfunded, but may be funded through savings or SRNS budget changes.
- Much of the Integrated Facility Aging Management recommended work is either not funded (H-Canyon old hot crane removal, pier supports) or is dependent on finding additional funds somewhere (HB-Line critical spares, K-Area roof repair). Funding may be available for the design to replace an old H-Area substation and K-Area switchgear, but not for procuring the actual equipment.
- No risk reduction work at 235-F is funded beyond developing a preliminary Project Execution Plan.
- No funding is available to purchase additional fire department apparatus (e.g., ladder truck).
- If a funding realignment is not approved, L-Area activities could be severely curtailed. This could dramatically impact shipments of fuel from L-to-H Areas and discontinue receipts of foreign and domestic research reactor fuel.