

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 17, 2000

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: C. H. Keilers / R. T. Davis
SUBJECT: SRS Report for Week Ending November 17, 2000

Americium-Curium (Am-Cm) Stabilization: In April, WSRC awarded a design-and-build contract for the in-cell vitrification equipment. This contractor is experiencing a growing number of design management challenges. While WSRC is working with the contractor to address these difficulties, the possibility exists that Recommendation 94-1 milestones will be affected.

Plutonium Disposition: This week, the Pit Disassembly and Conversion Facility (PDCF) design agent (WGI) submitted to DOE a draft report comparing HEPA filters to sand filters for the safety class tertiary building confinement. No recommendations are made. Key conclusions are that both options could work and life cycle costs are comparable. For the sand filter option, the report draws extensively from the wealth of Defense Waste Processing Facility (DWPF) design data, since there is little sand filter experience outside the DOE complex. The HEPA filter option studied is more complex than in previous facilities and includes electrostatic prefilters, automatic spray and demisters, and a filter deluge. The complexity is driven by the soot loading, branding, and temperatures predicted for the extremely unlikely, multiple-room, design basis fire. The fire analysis approach is similar to that used for the Actinide Packaging and Storage Facility (APSF). Of the two options, the HEPA filter case is predicted to have the lower capital costs but higher operating costs because of the additional active systems. DOE is evaluating the report.

Transuranic Waste: The DOE Carlsbad Area Office completed its audit this week of WSRC compliance with the waste acceptance criteria for the Waste Isolation Pilot Plant (WIPP). The audit team concluded that WSRC has the necessary programs in place but needs to improve implementation and effectiveness. The team complimented SRS efforts to date, particularly the thorough job of capturing requirements and the effective use of both Carlsbad guidance and lessons learned at other sites. The next steps are for Carlsbad to issue the preliminary audit report, verify WSRC corrective actions, finalize the report, and submit it to the state of New Mexico for review. The schedule appears to support first SRS waste shipment to WIPP in February or March 2001.

Integrated Safety Management: On November 7, DOE (EH-1) approved the WSRC application for Star status – the highest level – within the DOE Voluntary Protection Program (VPP). DOE established the VPP in 1994, based on the similar OSHA program, to recognize and promote contractor excellence in worker safety and health. At SRS, the VPP is an integral part of the Integrated Safety Management System, and achieving Star status has been a multiple-year objective.

Citizens Advisory Board (CAB): The CAB made recommendations to DOE-SR this week on the DOE contaminated scrap metal program and the Consolidated Incinerator Facility (CIF). CIF has been used to dispose of PUREX solutions by a proven process, but it is now shutdown. The CAB is concerned that DOE may not develop and implement alternative technology to CIF in time to meet the regulatory disposal date (FY 09). Furthermore, funding considerations and recently proposed RCRA permit modifications may force DOE to begin final closure of CIF in 2002, which is probably well before alternative technology can be started up. The CAB also discussed the SRS programs for plutonium stabilization and packaging and for highly enriched uranium blend-down. The site reps informed the CAB of the upcoming local Board public meeting on these topics.