

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 30, 1999

MEMORANDUM FOR: G. W. Cunningham, Technical Director
J. Kent Fortenberry, Deputy Technical Director
FROM: C. H. Keilers / R. T. Davis
SUBJECT: SRS Report for Week Ending July 30, 1999

Staff member J. West was on site this week reviewing the Americium-Curium (AmCm) project. Also, an EH review team is on site this week and next, assessing overall implementation of Integrated Safety Management (ISM) and, particularly, ISM related work planning and control.

Emergency Preparedness Drill - SRS conducted a practice drill this week in preparation for the annual exercise scheduled for late-August. The scenario involved a fuel truck crashing into the depleted uranium trailers in H-Area resulting in an explosion and radiological release. About 2 hours into the event, a simulated coil leak in an H-Canyon tank resulted in contamination of the circulated cooling water system. Simulated equipment failures prevent operators from diverting the contaminated water before an airborne release occurs at the cooling tower. In addition to DOE-SR and SRS contractors, DOE-HQ and representatives from South Carolina and Georgia participated in the drill. The emergency response teams generally responded appropriately to these scenarios while handling actual site emergencies and alarms (i.e., worker sickness and H-Canyon contamination alarm). Areas for improvement identified by both participants and drill coordinators included communication, coordination, contamination control, and protective action response. (I.A.4)

Year 2000 - WSRC has now completed compliance verification for all SRS mission-essential and safety-related systems. Independent verification and validation for these systems is on-going and is scheduled to be completed by mid-August. (I.A)

Canyon Activities - Last week, the site representatives reported an inadvertent transfer and a suck back of radioactive material into a gang valve corridor. This week, facility management briefed site management (Rudy, Schwallie) in detail on these occurrences and their safety implications, particularly for the AmCm project because of its high source term. The facility recommendations (e.g., on maintenance practices, engineering reviews, and walkdowns) appear responsive. (III.A.1)

Pit Disassembly and Conversion Facility (PDCF) - On July 20-21, DOE-MD held the initial coordination meeting at SRS between the site, the architect-engineer, and the other organizations involved in designing this facility. The record of decision is still pending. SRS is the preferred location. One key question is the relative responsibilities of the various DOE and contractor organizations to review and approve the design (site rep report 2/12/99). The site's role, particularly as the design authority and operator, still needs to be defined. Also, the designer (Raytheon), the safety analysts (Pacific Northwest National Laboratories), and the design authority/operator (SRS) all need to be in frequent and close communication to avoid safety issues arising late in the design. The current top-level schedule does not appear consistent with this approach, since it indicates that draft preliminary safety analysis report would be issued about 7 months after draft preliminary design. The site representatives have discussed this with DOE and have suggested that a specific plan be prepared covering these safety interfaces. (I.A.3, II.B.1, III.A.1)