

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 25, 2000

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: C. H. Keilers / R. T. Davis
SUBJECT: SRS Report for Week Ending August 25, 2000

R. West (outside expert) was on site this week observing the DOE HB-Line readiness assessment (RA). M. Duncan (technical staff) was on site for training.

HB-Line: WSRC completed and DOE started their respective readiness assessments this week for the mixed scrap campaign in Phase 1. Phase 1 may eventually dissolve 600 to 800 cans of low-assay uranium/plutonium materials that do not meet the criteria for STD-3013 storage or for disposal via the Plutonium Immobilization Plant or directly to WIPP. These materials are currently being sorted in the FB-Line characterization cabinet. HB-Line received the first shipment from FB-Line this week, based on a limited DOE approval, and is storing that material in containers that are similar to the 9975 design. DOE expects to complete its RA middle of next week.

FB-Line: One night last week, operators overflowed a transfer tank. They then attempted the transfer again and overflowed a seal pot into a cabinet. Operators then unsuccessfully attempted to transfer the solution in the sump to another tank. On-shift management was involved in these decisions. Because of the conduct of operations issues (e.g., transferring solution with active sump alarms), WSRC management reported the event this week as a management concern occurrence. A contributing factor to this event was design of the system (i.e., a ball valve being used as a throttle valve). Another factor was crew inexperience with this particular, infrequent transfer. Beforehand, the crew had discussed the evolution with other personnel who had previously conducted the transfer. DOE and WSRC management recognize the issues and are following up.

Storm Damage: Last Friday evening, a brief but severe thunderstorm passed through SRS causing power outages and minor damage to facilities. There were no reported injuries or releases of hazardous materials. The storm passed first through A-Area with maximum reported wind speeds of 89 mph. Several older buildings, including the fire station, lost roof sections or sustained siding damage. Some trees were toppled, and some trailers were knocked off their foundations. The storm then passed through the remainder of the site, reaching H-Area about an hour later. Facilities that lost power included H-Canyon, the Savannah River Technology Center (SRTC), the Effluent Treatment Facility (ETF), and the Consolidated Incinerator Facility (CIF). As designed, emergency diesel generators (including the H-Canyon Safety Class diesel) came on-line to maintain ventilation confinement. A lightning strike also burned out 2 of 3 motor starter coils for SRTC Building 773-A D-Wing exhaust fans. Adjustments to building ventilation were made to maintain confinement.

While the site's response was good, DOE and WSRC have identified opportunities for improvement. Particularly, as part of their authorization basis, some facilities are required to suspend operations in adverse weather. In this case, a severe thunderstorm watch had been announced in the afternoon, but no further announcements were made. H-Area (where most of the power outages occurred) could have had nearly an hour of advance notice if they had been notified of the high wind speeds in A-Area. WSRC is revising Operations Center procedures so that, in the future, all site areas should receive an advisory if any one area experiences severe weather.