DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 15, 2008

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: M. P. Duncan and M. T. Sautman, SRS Site Representatives
SUBJECT: SRS Report for Week Ending February 15, 2008

Quality Assurance (QA): A team of DOE and WSRC investigators concluded that while a major supplier had a well-documented QA program on paper, their work was not performed in accordance with NQA-1 requirements and they did not have the nuclear experience to meet NQA-1 requirements within the foreseeable future. The team's report states that dozens of QA hold points were signed when the equipment was actually at SRS, signed by unauthorized personnel, or bypassed altogether. Other team findings include: 1) use of non-certified welders, 2) inadequate preparation of weld-joint configurations, 3) failure to use calibrated equipment to perform quality control (QC) dimensional measurements, 4) changing QA data after verification, and 5) almost nonexistent training to NQA-1 requirements. Enforcement actions were previously levied against this supplier for generating fraudulent quality-related welding documentation at another DOE site. Key processing equipment for two major SRS projects were involved in the investigation, but the resulting nonconformance reports results were dispositioned as "use as is" or with minor repairs. DOE will request that WSRC identify corrective actions in light of the report's findings. While the investigation was focused solely on the supplier, DOE and the Site Rep agree that the performance of the supplier qualification and oversight processes needs to be examined to identify missed opportunities and lessons learned. One thing to note is that this report has not been formally approved by WSRC management. DOE has provided their expectations for oversight of QA/QC hold points to another contractor because the same supplier is under contract to provide critical processing equipment to that contractor.

Saltstone: Processing of 0.2 Ci/gal salt waste commenced. Although enclosures were installed around the roof's passive vents and auxiliary filtered ventilation was added, higher than expected contamination was found. Not only was surface contamination as high as 1,000,000 dpm/cm^2 β-γ inside the roof enclosure, but contamination escaped the enclosure (up to 14,000 dpm/cm^2 β-γ) and raised airborne radioactivity levels (7 DAC-hrs α, 0.7 DAC-hrs β-γ). There was no detectable air activity on the ground level air samplers and dose rates were as expected (up to 500 mrem/hr) elsewhere on the roof. The area has now been decontaminated and new modifications will be designed to better control cell roof exhaust before the facility resumes operations.

512-S: A valve supposedly locked out of service was found to be still pressurized because the pictures on an operator aid depicted the wrong positions for adjusting the 3-way valve.

Tank 51 to 11 Transfer: The tank 11 annulus conductivity probe began alarming again even before the tank 51 to 11 transfer had resumed. After the probe height was raised and the frequency of annulus camera inspections was doubled, the transfer resumed and was completed safely.

H-Canyon: Unloading of the first drum of Super Kukla material was delayed because the dissolver procedure would not work as written and discrepancies had to be resolved regarding the product can identification number and uranium mass written on the can itself and in the bundle charging plan. The material was unloaded safely the next day and charged in the dissolver.