DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 9, 2016

TO: S. A. Stokes, Technical Director

FROM: M. T. Sautman and Z. C. McCabe, Site Representatives

SUBJECT: Savannah River Site Weekly Report for Week Ending September 9, 2016

Tank Farms: In 2015, SRR rewet Tank 15, a formerly dry Type II tank. SRR is preparing to begin bulk waste removal of Tank 15 which will involve suspending the sludge in Tank 15, transferring the waste to Tank 13, and transferring the supernate from Tank 13 back to Tank 15, as required. The transfers between the two tanks will be via above ground transfer lines. Tank 15 also has twenty-four documented leak sites. SRR commenced their Readiness Assessment (RA) this week. The site representative observed dry runs involving the flushing of a submersible mixer pump and the transfer of supernate from Tank 13 to 15. The site representative also observed interviews with operations personnel and provided feedback on their conduct to the RA team.

Training: The site representative observed an SRNS oral board for an operations position. The site representative talked to operations management afterwards about the preparation of the candidate and board members, the questioning techniques used, the effectiveness of previous practice boards and remedial training, the grading of the answers, and the potential influence of the facility's staffing situation on the board's outcome. Operations management stated that they plan to change their oral board structure to provide a standard exam bank to help ensure standard execution across all boards and consistent grading. The site representative also observed a shift technical engineer (STE) oral board at the Defense Waste Processing Facility. The conduct of these STE oral boards has improved.

Savannah River National Laboratory (SRNL): SRNL Research and Development (R&D) personnel opened the two containers discovered inside a 9975 shipping container that was documented as not having a radiological history (see 8/19/2016 weekly). Although SRNL personnel assayed the containers and were confident that there was no radiological source inside they could not confirm that contamination was not present without opening the containers. R&D personnel removed the two containers from the 9975's primary containment vessel and placed them inside a glovebag. After R&D personnel opened each container, Radiological Protection Department personnel performed surveys of the inside of the cans and the contents and did not detect any transferrable contamination or measurable radiation dose. SRNL management are planning to conduct training for R&D personnel on conduct of operations and identifying when a "time out" should be taken to prevent future issues involving unexpected conditions and working outside the scope of a procedure.

Tritium: The improperly documented 9975 described above originated at the Tritium Facilities. Tritium personnel are determining the appropriate path forward to perform an extent of condition review of the 1,400+ shipping containers they currently have in storage.

K-Area: The SRNS RA of the Plutonium Down Blend project continued this week. The RA team presented their findings and opportunities for improvement for all but one functional area to K-Area Management. Of note, the RA team performed a full safety basis implementation review and identified 9 findings and 18 opportunities for improvement in that functional area.

In a limited scoped search, K-Area personnel have identified an additional 13 Criticality Control Overpacks in storage that do not have an issue with the lid gasket (see 8/12/2016 and 8/19/2016 weeklies).