DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 8, 2010

TO: T. J. Dwyer, Technical Director
FROM: D. L. Burnfield and M. T. Sautman, Site Representatives
SUBJECT: Savannah River Site Weekly Report for Week Ending January 8, 2010

F Area: Workers are banding and palletizing old depleted uranium oxide drums (DUO) in 221-22F for off-site shipment. Many of these drums are made of galvanized material while other drums have the paint intact. Some of the drums, however, exhibit visible degradation. While removing drums from the stack for banding and palletizing a few weeks ago, workers found that one rusty drum on the top level was breached. Oxide had leaked out, creating a high contamination area around the drum. Once the surrounding drums were removed, workers could see that the bottom of the drum was bulging and could not be counted upon structurally. The Site Rep attended a meeting where possible recovery actions were discussed. The recommendation was to build a clam shell from two halves of another 55-gallon drum. This clam shell would then be attached to the affected drum. Next, a nylon strap or banding would be inserted under the drum to support the damaged bottom. Then the drum would be lifted slightly so an 85-gallon overpack drum lid could be slid underneath the drum. Finally, the affected drum would be overpacked, banded, and palletized while it was upside down. When the Site Rep later observed a similar DUO palletizing evolution in N-Area, he noted variations in the heights, diameters, and rib locations amongst the drums. The Site Rep talked with the contractor and facility representative to make sure their planned mockup would use the actual drum design to ensure the overpack drum will fit the breached drum. (See 8/1/08 and 12/4/09 reports).

Operations: A submersible mixer pump was transferred from Tank 6 to Tank 5. The Site Rep also watched a sample crawler take a waste sample from the bottom of Tank 19. Cold weather throughout the week impacted tank farms and transuranic waste remediation activities.

HB-Line: Both dissolvers are out-of-service. The heater block on one dissolver failed, while the second dissolver began to leak.

Site Policy and Procedure Council (SPPC): The Site Rep attended the periodic meeting of the SPPC. The SPPC approved two site-wide procedures (2S 1.1 *Procedure Administration* and 2S 1.3 *Procedure Compliance*). The presenter stated that these changes clarified that verbatim compliance is not required for Technical Reference (TR) procedures. However, site procedures do not provide detailed criteria for what should be a Use Every Time (UET) or TR procedure. When the Site Rep reviewed existing, facility-specific training material, he found inconsistent expectations on verbatim compliance for TR procedures. Because verbatim compliance for TR procedures was the expectation at some facilities, it might be prudent to review the existing TR procedures to determine if this classification is still appropriate or whether they should be converted to UET procedures if verbatim compliance is what really was necessary.