

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 11, 2007

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: J. S. Contardi/M.T. Sautman, SRS Site Representatives
SUBJECT: SRS Report for Week Ending May 11, 2007

Savannah River National Laboratory: Facility management has evaluated the impacts of unpacking plutonium oxide samples from the shipping container inside the facility. Based on the evaluation, the materials will now be unloaded within the facility. (Site Rep weekly 4/27/07)

Transuranic (TRU) Waste: The current onsite safety assessment (OSA) limits the transportation of TRU waste drums to 450 fissile grams Pu-239 equivalent (FGE). The contractor developed a draft Justification for Continued Operations for F-Canyon that raised this limit to 5000 FGE (11X higher) and 2000 Pu-239 equivalent curies (PEC). Rather than authorize this per DOE transportation requirements via an OSA, the contractor argued that this was not onsite transportation, but two intra-area drum movements since they were using gravel service roads. Thus they wanted to authorize this transfer using a F-Canyon Justification for Continued Operations (JCO) that would cover transportation from F-Canyon to the boundary of E-Area, where the Solid Waste Management Facility Documented Safety Analysis (DSA) would take over. Although facility DSAs often address transportation around a facility, the Site Rep questioned the appropriateness of using a facility JCO for transportation on the road between two areas. While controls have been identified (FGE/PEC limit, emergency response and traffic control programs), these are solely administrative versus engineered (e.g., overpack). A transportation safety analysis would also avoid the dramatic change in required controls that occurs when the vehicle passes by the E Area gate. DOE senior management was skeptical of the proposal when it was discussed with them.

H-Canyon: The Site Rep met with the contractor to discuss the methodology used to functionally classify jumpers in the facility. Historically, the facility has classified all jumpers as general service or production support despite the fact that several of the jumpers are associated with systems classified as safety significant (e.g., process vessel vent and air purge systems). To address the potential discrepancies the contractor will evaluate the classification of the jumpers in the safety basis upgrade which is currently under development.

Standing Orders: Although site standing orders do not have a cancellation date and many are old, the contractor believes their standing orders comply with requirements. That being said, they have eliminated a number of orders no longer needed, converted others into procedures, and require an Unreviewed Safety Question screen and Engineering approval for those that implement authorization basis controls. (Site Rep weekly 1/12/07)

Defense Waste Processing Facility: Preparations for replacing the slurry mix evaporator were delayed when the contractor encountered difficulty in removing a dip tube. The remaining frit and sludge have hardened such that the dip tube cannot simply be removed. The contractor intends to use nitric acid and mechanical tools to help remove the material. If the dip tube cannot be removed, a new dip tube will have to be manufactured which could add several weeks to the outage.