DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 20, 2024

TO: Timothy J. Dwyer, Technical Director
FROM: Clinton Jones, Resident Inspector
SUBJECT: Oak Ridge Activity Report for Week Ending September 20, 2024

Building 2026: The resident inspector attended a critique for a skin contamination event at Oak Ridge National Lab. The contamination occurred during the transfer of a tank containing depleted uranyl nitrate solution from a cask to an air pallet designed to transport it into the facility. The air pallet is designed with walls and a removeable lid to enable shielding of the tank. The operator initially discovered radioactive contamination on his work gloves after voluntarily frisking his gloved hands upon completion of rigging removal from the tank. The operator notified the radiological control technician (RCT) assigned to the job of the abnormal readings on his gloves and he was redirected to the personnel contamination monitor (PCM) for a whole-body frisk. Upon completion of the whole-body frisk, the PCM indicated contamination present on the operator's upper left forearm. The RCT successfully decontaminated the operator and directed the other workers to complete whole-body frisks in the PCM. One other operator had contamination on his boot and was also successfully decontaminated. The facility manager paused the work and the area around the air pallet was posted as a contamination area. No other contamination was found outside of the air pallet. Since contamination levels found on operations personnel exceeded reporting thresholds, Isotek filed an occurrence report. During the critique, Isotek discovered that an incomplete survey for loose surface contamination had been performed upon removal of the air pallet lid. The facility manager verified this as the area where the operator had leaned on his left forearm when removing the rigging from the tank shackles. Isotek is developing corrective actions to prevent both the suspected cause of the contamination on the air pallet and the incomplete survey practice.

Conduct of Operations: The resident inspectors met with the new director for Facility Operations Management (FOM). The director discussed current and past performance issues of FOM with respect to the recent Triannual Issues Management Meeting Report emerging item of interest (EII) titled "Y-12 Facility Operations Management Performance." CNS identified the causes of issues in FOM to be: a lack of structured and formalized foundation training for shift managers and shift technical advisors; a reduction in the average experience of FOM personnel caused by attrition and high turnover; and staffing levels that are not adequate for facility workload. In response to the EII, CNS has developed a training initiative for new FOM personnel and has shifted resources to temporarily address staffing levels at affected facilities. CNS also plans to permanently increase staffing at affected facilities, complete facility specific qualification card enhancements and re-establish continuous learning training for existing personnel. CNS is revising the *Y-12 Conduct of Operations Continuum Plan* to capture FOM conduct of operations specific needs. The resident inspectors continue to follow these improvements and have a recurring meeting established with the FOM director to discuss the progress.