

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 18, 2021

TO: Christopher J. Roscetti, Technical Director
FROM: Z. C. McCabe Resident Inspector
SUBJECT: Savannah River Site Activity Report for Week Ending June 18, 2021

Salt Waste Processing Facility (SWPF): Last week the resident inspector walked down the SWPF facility with DOE-SR and a member of the Board's technical staff and noted several observations. The resident inspector found two Hazardous Energy Control locks with the keys in them and two "Danger Do Not Operate" tags associated with a removed lockout laying under the decontaminated salt solution coalescer. Parson's conduct of operations procedure requires these tags to be returned to the shift operations manager after a lockout is removed. The resident inspector informed Parsons management of the issue and later confirmed the tags and locks were removed during a follow-up walkdown this week.

Since beginning processing in SWPF, Parsons personnel have identified multiple high radiation areas that were not anticipated. One such area is the process vessel ventilation (PVV) filter room. This room has two entrances, one has a door and the other is an opening approximately 6 feet wide. As a temporary means (albeit over 8 months) Parsons chose to control this entrance with a high-density polyethylene mesh and nylon zip ties until a permanent modification can be installed. The resident inspector noted a pair of scissors next to the unattended barricade. Additionally, Parsons has discovered a high radiation area in the Caustic Side Solvent Extraction corridor that is barricaded by a plastic safety fence and zip ties. Due to egress concerns, the fence is configured such that most of the corridor remains clear and the dose at the barricade measures over 50 mrem/hr at times. Access to this area is only controlled by a radiation area sign without a rope. The resident inspector discussed these radiological controls with Parsons and DOE-SR who believe these are acceptable except for the cutting tool near the PVV filter room entrance.

Savannah River Tritium Enterprise (SRTE): NNSA-SRFO has approved a safety basis that resolves known issues and relies on several fire barriers as safety class controls to prevent a fire from propagating from one facility to another. This safety basis is scheduled for implementation in 2025. H-Area New Manufacturing (HANM) has numerous fire impairments that were identified by SRTE personnel in 2020 after a site procedure revision drove additional inspections and documentation. Several of these impairments are in the wall and floor penetrations of 233-1H which connects HANM and several other facilities. The resident inspector walked down several of the accessible fire impairments that are planned safety class barriers with SRTE and NNSA-SRFO personnel. SRTE personnel have documented the need to upgrade these impairments and are planning to have the impairments resolved prior to implementing the safety basis that credits the safety class fire barriers. Other (not safety class) documented impairments in HANM are not scheduled to be resolved until 2028. SRTE personnel have not yet developed a conceptual design package for these upgrades.

H-Area Tank Farms: The resident inspector observed a field emergency preparedness drill that involved two personnel getting splashed with contaminated bearing water while working at Tank 50. The controller organization took appropriate coaching opportunities during drill play.