

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 9, 2021

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** M. T. Sautman and Z. C. McCabe, Resident Inspectors  
**SUBJECT:** Savannah River Site Activity Report for Week Ending April 9, 2021

**Savannah River Tritium Enterprise (SRTE):** Due to continued issues, H-Area New Manufacturing personnel have implemented a period of Senior Supervisory Oversight. A similar compensatory measure was last implemented temporarily in early March (see 3/5/21 report).

This week SRTE personnel convened a fact finding meeting for the violation of the Technical Safety Requirements for the incident involving the installation of a lockout that impacted more safety related Tritium Air Monitors (TAMs) than STRE personnel believed (see 4/2/21 report). In addition to the failure to recognize the impact of the lockout, the fact finding revealed a significant weakness in the understanding of the status lights for the tritium monitoring system used throughout SRTE. Outside of typical process rooms there is a red light that provides personnel with information regarding the TAMs in that room. A dimly lit light indicates that the system is operating properly, whereas a brightly lit light indicates that the TAM inside the room is in an alarm state. No illumination indicates an issue with that TAM. This system is intended to be relied on each time an individual enters a process room. Although the light was not illuminated outside the impacted rooms for this event, at least ten people still entered the impacted rooms. The requisite knowledge of the meaning of these status lights is provided through two one-time trainings: facility entrance training (a requirement for facility access), and another with a much more limited audience. Neither explicitly state what no illumination means. Management's informal interviews with personnel revealed a widespread lack of understanding regarding no illumination. SRTE personnel also identified that there are dozens of people with access to the facility that have not completed the required facility entrance training.

**Savannah River National Laboratory (SRNL):** SRNL operations personnel incorrectly determined that ¼ of the fuel tank of the portable air compressor would provide supplied air for long enough for five individuals to get cut out of plastic suits and exit an airborne radiation area. In practice the compressor ran out of fuel (with reserve tanks remaining) when the last of the five individuals was about to be cut out of their plastic suit. The individual responded in accordance with their training and removed their hood and exited the area without additional issues.

**Building 235-F:** Last year, SRNS placed sealant around manipulators known to have leaks (see 3/20/20 report). The resident inspector examined where SRNS had recently applied sealant to the other cell manipulator penetrations. SRNS is also having a fire protection engineer analyze the volume and hazards of oils being drained from equipment to support the unreviewed safety question process. The oils are stored in sealed metal containers inside a drum outside of 235-F.

**Solid Waste Management Facility (SWMF):** The shift operations manager observed a Transuranic Waste Pad floor removal task and reviewed the applicable paperwork. They noted two discrepancies between the hazard analysis and the field work. In both instances the personnel involved were working appropriately given the task and tools used; however, the paperwork did not match. The personnel involved discussed the task and appropriate controls during the prejob brief, but did not adequately review the hazard analysis prior to starting work.