

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 1, 2019

TO: Christopher J. Roscetti, Technical Director
FROM: Z. C. McCabe, Resident Inspector
SUBJECT: Savannah River Site Activity Report for Week Ending March 1, 2019

Staff Activity: Mr. D. Cleaves and Ms. L. Lin were on site this week to augment resident inspector (RI) coverage, and observe 235-F activities.

Savannah River National Laboratory (SRNL): Multiple events led to SRNL personnel performing activities in a glovebox that may have been isolated from the safety-significant (SS) Off-Gas Exhaust (OGE) System, credited to sweep out flammable gases. In June 2018, SRNL personnel removed all accountable material from the glovebox in preparation for deconstruction and removal. In July, construction personnel executed a work package to remove some service tubing. A picture taken three days after construction personnel completed the work shows that the service tubing and the adjacent glovebox differential pressure (DP) gauge tubing was removed. On two separate occasions after the tubing was removed, SRNL personnel performed activities inside the glovebox, one involved the brief use of a heat gun. Prior to performing work in any laboratory module, SRNL personnel are required to perform a checkout to ensure the module is safe and equipment is in service, which includes a step to verify that the DP gauge is reading within the acceptable range. This was either not performed or performed inadequately. When other personnel noted the zero reading on the DP gauge last week, they performed a follow up walkdown and found the SS damper associated with the glovebox's branch of OGE system closed, which isolated the glovebox from the OGE system. SRNL personnel have not been able to determine when the damper was closed. SRNL personnel are still determining the causes of this event.

Last week, the RI observed the preparation of a high radiation sample. Just before the pre-job brief, SRNL personnel were determining the appropriate radiological work permit (RWP) for the evolution before deciding that the standing RWP would likely suffice based on the most recent radiological measurements. Afterwards the RI pointed out that the job-specific RWP the personnel were considering was not covered by the hazard analysis for the task. Additionally, the RI noted that the hazards analysis had not be reviewed or updated for over two years, despite the requirement for a complete bi-annual review. SRNL personnel informed the RI that they had an extension in the form of an email from the applicable manager. Further investigation revealed that this informal extension process (used at least one additional time for another hazards analysis) is not consistent with the SRNL Hazards Analysis procedure. It does not appear that this resulted in any unidentified hazards.

Emergency Preparedness (EP): The RI and the Board's staff observed the 2019 SRS EP Evaluated Exercise. The scenario for the exercise involved a formic acid spill at the Defense Waste Processing Facility (DWPF) and a minor personnel injury. As part of the scenario, the fire engine responding to the event collided with another automobile, which resulted in additional injuries. DOE-SR and contractor personnel are evaluating the performance.