

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 29, 2022

TO: Christopher J. Roscetti, Technical Director
FROM: A. Z. Kline, L. Lin, Z. C. McCabe, and E. P. Richardson, Resident Inspectors
SUBJECT: Savannah River Site Activity Report for Week Ending July 29, 2022

Tank Farms: On the evening of June 30, an operator performing rounds identified that the Tank 3 exhaust fan had failed. The control room personnel responded by entering the applicable limiting condition for operation and restarting the fan. During the investigation, Tank Farms personnel noted that control room personnel received the low vacuum alarm (not credited) on the previous shift. Review of the distributed control system (DCS) alarm log revealed that the low vacuum alarm came in and cleared, was acknowledged, came in again and locked-in, which also was acknowledged in less than a second. Tank Farms personnel believe the control room operator inadvertently double clicked acknowledge. This occurrence was not announced in the control room or logged in the operator logbook. Over the next several weeks, the resident inspectors (RIs) inquired about the details of this event. Tank Farms personnel determined that a formal fact-finding or issue investigation meeting was not necessary; however, they had not progressed in completing the documentation of the alarm response issue in a timely manner. After additional questioning regarding the alarm response, Tank Farms personnel informed the resident inspectors of the aforementioned details surrounding the alarm. In addition, they acknowledged additional concerns, including potential alarm fatigue due to excessive “nuisance” alarms and that the logged locked-in alarm was hidden from immediate view on the DCS by a significant number of other alarms. Tank Farms personnel are in the process of formalizing the issue report regarding this issue and corrective actions.

Defense Waste Processing Facility (DWPF): The RIs conducted a facility walkdown at DWPF and noticed a discrepancy between a redundant safety related alarm and interlock panels at the Low Point Pump Pit (LPPP). On the redundant panels, the first panel showed alarm status for agitator low power while the second panel did not show alarm status for low power. The facility was aware of the discrepant condition and the bulb needed to be replaced on the panel that did not show an alarm state. A work order had been generated to replace the bulb and the impaired condition was being noted on the shift rounds. The RIs questioned why there was no tag or indication of the impaired alarm at the local panel in accordance with site procedures. DWPF personnel are looking into this concern.

H-Canyon: The RIs attended an issue investigation related to the installation of a safety class conduit in the field without proper Quality Assurance (QA) verifications completed. An engineer had removed the Quality Inspection Plan (QIP) from workflow for edits in September 2021. The work package was approved in June 2022 without an approved QIP, so the required inspection points were not listed in that package. The problem was discovered after the conduit was installed in the field when a QA engineer mentioned that there should be inspections required that were not documented. During the issue investigation, the RIs questioned whether there was a requirement during the work package review to check if the QIP is approved. Personnel discussed evaluating implementing a control to ensure QIPs and other supporting documentation are approved and included in the work package when applicable. The QIP has since been approved and the conduit will be inspected prior to being put into service.