

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 9, 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 September 9, 2022

Event Investigations: The resident inspectors (RI) have initiated a review of event investigations at SRS due to concerns regarding the conduct and conclusions of certain recent investigations. As part of the initial phase of the effort, the RIs have transmitted a list of questions focused on DOE Order 422.1 requirements regarding investigators, the site implementing procedure, and conduct of investigations. The order requires investigators to have no bias or vested interest in the outcome of the investigation; be experienced and technically qualified; and be trained in facility systems, operations, and investigative techniques. The RIs determined that the site procedure has some gaps that would allow investigations to be conducted by individuals that do not meet these requirements. In application of a graded approach, the site procedure provides differing guidance for investigations of reportable and non-reportable events, but the DOE Order makes no such distinction. The site procedure requires reportable events be investigated by an individual who has completed a fact-finding director qualification card, but it is not required for investigators of non-reportable events and there is no qualification process or informal training requirements for investigators for non-reportable events. Additionally, investigators (for reportable and non-reportable events) have no required or expected training on facility systems, operations and investigative techniques as required by the order. Further, the site procedure allows for personnel to conduct investigations for events within their immediate organization, as opposed to requiring investigators to have no bias or vested interest in the outcome. For example, the site procedure allows for a shift operations manager to be the investigator for operational issues. Bias and technical competency are considerations, but site organizations largely rely on the responsible manager's selection of investigators to ensure these requirements are fulfilled. In practice, the implementation by the various responsible manager appears to be informal and has revealed mixed results.

Issue investigation is an important part of the continuous improvement process and allows for the proper identification of issues, direct causes, and compensatory measures, which directly supports causal analyses and development of corrective actions to prevent recurrence. Although the RIs have noted some less than adequate investigations and several gaps in the site requirements for investigators, several groups at SRS nominally perform investigations in a way that produce the desired outcome.

Solid Waste Management Facility (SWMF): The RI attended an issue investigation on a Technical Safety Requirement implementing procedure for monthly transuranic waste facility inspections where the operator incorrectly marked the status as "SAT" (satisfactory) instead of "N/A" for whether certain drums were stacked (i.e., there were no drums of that type, so it should have been marked not applicable). The supervisor reviewed the procedure for anything that stood out (e.g., was unsatisfactory), but did not review the procedure completely for accuracy. The error was discovered during engineering's review of the procedure. This is the third time issues have been found with the performance of this procedure in the past year. The issue in February 2022 has a corrective action identified to clarify the wording in the procedure.