

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 22, 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 January 22, 2021

Oral Examinations: SRNS changed their guidance for grading oral boards such that a failure to recognize or take actions to mitigate a violation of the safety basis would not result in an automatic failure, but should weigh heavily when assigning the overall grade. The resident inspectors (RI) discussed this change with the SRNS Training Manager. One of the primary responsibilities of shift operations managers and shift technical engineers is to ensure they operate within the safety basis and react accordingly when limiting conditions for operation are not met. That being said, there is also desire by SRNS that a single mistake or a not fully compliant answer would not cause a candidate to fail an otherwise satisfactory oral board. The focus of this new guidance appears to be centered on violations that do not result in actual unsafe conditions or that are mostly administrative. However, the RIs are concerned that this guidance could be misused as a justification for passing a candidate who clearly violated the safety basis and whose actions/inaction in a real event would have resulted in an accident. Further, many facilities do not utilize a question bank where the minimum criteria for a passing answer is defined, which could help prevent improper use of this guidance.

H-Area New Manufacturing: When a procedure was revised in 2011, a valve was inadvertently dropped from a valve lineup that supports changing the Z-Bed lineup in the purge stripper system. This week, a rupture disk blew when an operator performed the valve lineup as written, which left all three manual pump discharge valves being closed simultaneously with the pumps running. This was the first time this particular option had been performed with this version of the procedure. Workers quickly identified the problem and responded properly.

Hazardous Energy Control: A member of the SRNS Independent Evaluation Board was reviewing the hazards analysis associated with the procedure used for moving the Cask Car into the Rail Road Tunnel Airlock at H-Canyon and questioned whether the control of the railcar was appropriately implemented. The site standard requires the use of the Hazardous Energy Control manual isolating for railcars under specific instances, including when personnel protection is required and when operations is working on the bed of the cars. Contrarily, the H-Canyon procedure utilizes other means (outside of the Hazardous Energy Control manual) to control the potential hazard. The other means include multiple derailleurs, a custodian lock, brake, and wheel chocks. H-Canyon personnel placed the impacted procedure on administrative hold. Upon performing a preliminary extent of condition, H-Canyon identified additional procedures impacted and informed other facilities on site of the issue. L-Area determined that they may also have a similar issue.

Salt Waste Processing Facility: Parsons completed hot commissioning and officially began the first year of operations. The caustic side solvent extraction process went into hold processing three times and did a hard shutdown three times. The causes of these involved high differential pressures in the strip effluent (SE) coalescer, high turbidity on a pump discharge, communication failures, etc. The SE coalescer was flushed with water and nitric acid.