

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 6, 2020

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 March 6, 2020

H-Canyon: A support contractor for DOE-SR was reviewing a completed preventative maintenance work package and noted that it lacked any acceptance criteria for an orifice diameter measurement and the recorded measurement only consisted of a single significant figure (i.e., “1”). Upon further investigation, SRNS personnel determined that the acceptance criteria should have been 1 ± 0.001 inch based on a calculation assumption. During an issue investigation, SRNS personnel determined that the apparent causes were the inadequate quality and review of the work package. SRNS is in the process of developing corrective actions to address this shortcoming. The actions will include a briefing to H-Canyon personnel that review, approve, and use maintenance work packages. The briefing will focus on the quality assurance requirements specifically related to acceptance criteria. Additionally, SRNS has concluded that the preventative maintenance as performed is acceptable based on the measurement and testing equipment used, discussions with the mechanics involved, and photographs of the orifice.

Solid Waste Management Facility (SWMF): Due to a revision in the nuclear criticality safety evaluation, SWMF personnel are no longer required to separately track beryllium containing containers as a subset of transuranic waste containers for criticality safety purposes. However, SWMF personnel kept the beryllium container category in their database for other (non-criticality related) reasons. As part of the recent safety basis implementation, SWMF personnel updated the fissile material limit for containers with beryllium via their database maintenance procedure. Rather than changing the limit to match the fissile material limit for containers without beryllium, SWMF personnel changed the fissile material limit for beryllium containers to zero. The error was noticed shortly after the revised safety basis was implemented when a container was flagged for exceeding the incorrect fissile material limit.

K-Area: Just prior to beginning open glovebox maintenance, an industrial hygienist questioned whether construction personnel had the required training for the potential beryllium hazard in the glovebox (see 1/27/20 report). They did not. This week K-Area personnel convened an issue investigation to determine the cause of the oversight. The investigation revealed that there was a general lack of knowledge regarding when the beryllium training course is required at K-Area. Additionally, a question on the hazards analysis for the open glovebox maintenance appeared to have been inaccurately answered. Had that question been answered correctly, it would have required the hazards analysis to be developed by a facility team rather than an individual, which would have been another opportunity to appropriately identify the beryllium hazard.

Salt Waste Processing Facility: The DOE Operational Readiness Review (DORR) team submitted their final report. DOE provided comments on the draft corrective action plans (CAPs) for the DORR findings. Parsons expects they will be able to resolve DOE’s comments on the draft CAPS and bolster their causal analyses of the CAPS by March 20.