

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 7, 2020

TO: Christopher J. Roscetti, Technical Director
FROM: Austin R. Powers, Cognizant Engineer
SUBJECT: Nevada National Security Site (NNSS) Report for July 2020

DNFSB Staff Activity: The Board's staff called into a meeting on the Device Assembly Facility (DAF) soil-structure interaction analysis. The staff conducted no onsite activities at NNSS during July.

COVID-19 Impact: During July, NNSS remained in Phase 2 of its return to work plan. In this phase, NNSS continued to execute approved mission-critical and high priority programmatic activities associated with the "Normal Operation with Maximum Telework" work status.

Downdraft Table Restart Status: As discussed in the NNSS Monthly Report for June 2020, a federal readiness assessment (FRA) team began their assessment for downdraft table operations at DAF. In July, the FRA team completed their assessment and issued their final report. The FRA team identified four pre-start findings and no post-start findings. The pre-start findings include a procedure that cannot be conducted as written, inappropriate response to an upset condition, tubing for a continuous air monitor not meeting industry standards, and ineffective implementation of the radiation protection program. The Nevada Field Office (NFO) is responsible for validating closure of the pre-start findings prior to the restart of operations. The FRA team also included lessons learned in the final report. Given the unique circumstances due to the COVID-19 pandemic, some of the lessons learned are related to improving future FRAs that may be conducted remotely (e.g., preparing the site for video recording activities).

National Criticality Experiments Research Center (NCERC) Incident: During July, Los Alamos National Laboratory (LANL) personnel at NCERC moved nuclear material associated with an activity into a building at NCERC. Prior to opening these containers, LANL identified other fissionable material present in the building. This other material had not been analyzed or assigned a criticality safety index value. As a result, the LANL Nuclear Criticality Safety Division (NCS) analyzed the scenario and determined that the other material present did not cause any criticality safety limits to be exceeded. The NCS proposed a path forward to return to criticality safety compliance. However, the NCS analysis did not discuss why the material was not removed prior to moving the containers for the activity into this building. The criticality safety evaluation for the planned activity includes an administrative requirement that states that other material may not be stored in the same location as the activity. Although no criticality safety controls were violated, this event is similar to the human error initiated events that resulted in a hot operations pause at NCERC in 2019 (see NNSS Monthly Report for August 2019). NFO is working to ensure the path forward includes appropriate measures to prevent recurrence.

NNSS Wildland Fire: During July, the NNSS Operations Command Center identified fire and smoke plumes on site. NNSS Fire and Rescue contacted the Bureau of Land Management for assistance in combating the fire. The wildland fire was estimated at 750 acres. The fire has since been extinguished. NFO stated that there were no injuries and no impact to mission facilities or assets, including the U1a Complex which was several miles away from the fire.