

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 8, 2021

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

DNFSB Staff Activity: During December, A. Powers, M. Dunlevy, S. Sircar, and R. Wu conducted a teleconference review of the NNSS atmospheric dispersion analysis with personnel from Mission Support and Test Services, LLC (MSTS), and the Nevada Field Office (NFO). The review focused on MSTS' plans to update the atmospheric dispersion calculations for the NNSS defense nuclear facilities by following the process outlined in Department of Energy (DOE) Standard 3009-2014, *Preparation of Nonreactor Nuclear Facility Documented Safety Analysis*. MSTS plans to use Option 3, which allows contractors to make site-specific calculations using parameters and methods tailored to their sites. In addition to this review, A. Powers and P. Migliorini virtually attended the Integrated Nuclear Criticality Safety Program (NCSP) Committee meeting in December. The Board's staff conducted no onsite activities during December.

COVID-19 Impact: During December, NNSS remained in Phase 2 of its return to work plan. In this phase, NNSS continued to be in the "Normal Operation with Maximum Telework" work status. The increase in confirmed COVID-19 cases in Nevada has not impacted the ability of MSTS to maintain required staffing at the NNSS defense nuclear facilities.

Device Assembly Facility (DAF) Downdraft Table: As discussed in the NNSS Monthly Report for October 2020, MSTS identified a penetration that was not properly sealed and loose bolts when performing the in-service inspections for the downdraft table confinement system and secondary confinement structure. To repair these issues, MSTS installed the appropriate sealant to the open penetration and tightened all loose bolts. In December, MSTS completed the nonconformance reports for these issues.

Integrated NCSP Meeting: MSTS, Los Alamos National Laboratory (LANL), and Lawrence Livermore National Laboratory each have its own DOE approved NCSP. The three entities have established an integrated NCSP for the laboratory activities performed in NNSS defense nuclear facilities. As part of the integrated NCSP, the laboratories and MSTS have established an Integrated NCSP Committee. The committee has several responsibilities, such as meeting at least annually to discuss potential changes to the integrated NCSP and share information related to the health of the program. As noted above, the Integrated NCSP Committee held a virtual meeting in December. This was the committee's first meeting since December 2019. Typically, the committee meets twice a year, but it was unable to do so this year due to the ongoing pandemic. During the meeting, each entity discussed the health of its NCSP by discussing the results of its most recent metrics report. The health for each program was positive. As it related to NNSS, LANL noted that it has continued to make progress on the backlog of criticality safety evaluation compliance issues for the Plutonium Facility at LANL and, as a result, will have additional time to support NNSS activities in the future. In addition, LANL noted that it completed the annual review for NNSS fissile material operations in October. The committee plans to meet again this upcoming summer.