

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 2, 2019

TO: Christopher J. Roscetti, Technical Director
FROM: Daniel B. Bullen, Ph.D., P.E., Cognizant Engineer
SUBJECT: Sandia National Laboratories (SNL) Report for July 2019

Defense Nuclear Facilities Safety Board Staff On-Site Activity: None during July 2019.

Waste Isolation Pilot Plant (WIPP) Mobile Loading Unit (MLU) Management Self-Assessment (MSA): On July 8–22, 2019, National Technology and Engineering Solutions of Sandia, LLC (NTESS) personnel conducted the MLU MSA. The MSA precedes the contractor readiness assessment (CRA) that will be executed by NTESS in accordance with their procedure GN470109, *Implementing the Startup and Restart Process for Nuclear Facilities, Operations, and Activities* (See SNL Reports for March 2019 and May 2019). The MSA identified no pre-start findings. NTESS is currently awaiting waste certification by the U.S. Environmental Protection Agency (EPA), which must be noticed by EPA in the Federal Register. NTESS plans to complete the CRA and ship this waste to WIPP by the end of calendar year 2019.

Technical Area V (TA-V) Fire Alarm System Panel Replacement: On July 9, 2019, NTESS subcontractors replaced the fire alarm system panel in the Gamma Irradiation Facility. The replacement panel improves the functionality of the fire alarm system in TA-V. The fire alarm panel upgrade was identified in the November 2018 corrective action plan developed by NTESS in response to a Sandia Field Office (SFO) assessment of fire protection in TA-V (See SNL Report for November 2018).

Auxiliary Hot Cell Facility (AHCF) – Waste Repackaging Campaign 16: The AHCF staff continued preparations for the disassembly of the final assembly used in the Degraded Core Coolability (DCC) experiments as part of Campaign 16 (see SNL monthly reports for February 2019, and June 2019). AHCF staff have completed gas sampling of the DCC-3 container and are awaiting results of the analysis. AHCF staff plan to complete Campaign 16 in September 2019.

Emergency Management Program: In response to the challenges identified during recent annual emergency exercises at SNL, NTESS and the SFO have undertaken actions to improve the emergency management program including:

- Benchmark comparisons with the Los Alamos National Laboratory (LANL) emergency management program.
- Observation of the Sandia National Laboratories-Livermore annual emergency exercise.
- Discussions with Livermore Field Office management and staff regarding their recent protective action drills in radiological facilities

The SFO is preparing a response to the NTESS After-Action Report for the 2019 Annual Emergency Exercises that will request a corrective action plan by September 16, 2019.

Sandia Pulsed Reactor/Critical Experiments (SPR/CX) Fire Protection System Installation: During the month of July, TA-V staff and contractors began preparation and staging work for the installation of a fire suppression system at SPR/CX. Preliminary work includes construction of the water line connecting to the 14-inch water supply pipeline located outside TA-V. Installation of the SPR/CX fire protection system is expected to be completed by the end of calendar year 2019.