DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 7, 2021

TO: Christopher J. Roscetti, Technical Director

FROM: Alexander Velazquez-Lozada, Cognizant Engineer

SUBJECT: Waste Isolation Pilot Plant (WIPP) Report for April 2021

DNFSB Staff Activity. The staff participated in regular conference calls to maintain cognizance of site activities.

Response during COVID-19. As COVID-19 cases decrease, WIPP personnel continue monitoring the situation in adjacent counties. Carlsbad Field Office (CBFO) increased the number of staff present on site for oversight to an average of 4 per day. WIPP completed the scheduled 56-day maintenance outage and has resumed receiving shipments at a rate of 5 per week, with post-pandemic plans to increase to 10 shipments per week.

Underground Ventilation System-700C Fan. WIPP personnel completed the evaluation of the radiological data collected during January's 4-hour test and presented the results at a public town hall meeting on April 15, 2021. The data collected indicated that radiological exposure was below radiological regulatory limits. Nuclear Waste Partnership, LLC (NWP), personnel are preparing for further 700C Fan testing and balancing of the underground airflows, which NWP plans to conduct by August 2021.

Safety Significant Confinement Ventilation System (SSCVS) Construction. NWP has conducted a series of surveillances to assess the Quality Assurance (QA) Program and activities involving safety significant systems and components of their new subcontractor, The Industrial Company (TIC). After evaluating QA Program implementation and ensuring it was aligned with NQA-1 2008, 2009a, NWP lifted the restrictions previously imposed on TIC regarding the performance of safety significant work. NWP QA personnel will continue field oversight of construction activities as well as field and programmatic surveillances.

Utility Shaft Project. Though work is currently paused, in May, the contractor plans to resume repairs to the plenum, preventive maintenance of equipment on-site, and shaft water removal. Shaft sinking activities will not resume until the New Mexico Environment Department (NMED) approves a hazardous waste permit modification. NMED will hold a public hearing starting on May 17, 2021 (duration TBD). In addition, NWP has awarded Phase 1b of a subcontract for the Hydro-geophysical Exploration of Brine Anomalies (HEBA) project with the objective to collect data and calculate the probability of encountering pressurized brine around the utility shaft.

Safety Basis. NWP completed the Implementation Verification Review (IVR) for Documented Safety Analysis (DSA) Rev. 7a. NWP made changes to events in the hazard analysis related to a roof collapse in a filled disposal panel and a seismic event in the Waste Handling Building resulting in a fire. The Board's staff is currently reviewing these and other changes in the DSA. NWP also completed a separate IVR related to replacing the six small fans at Bulkhead 309 with two bigger fans. These fans are used to boost the internal pressure in the Bulkhead 309 chamber and consequentially at the waste shaft station.