

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 6, 2023

TO: Katherine R. Herrera, Acting Technical Director
FROM: Alexander Velazquez-Lozada, Cognizant Engineer
SUBJECT: Waste Isolation Pilot Plant (WIPP) Report for December 2022

DNFSB Staff Activity. The Board's staff participated in regular conference calls to maintain cognizance of site activities. During the week of December 5th, Board's staff members M.R. Bradisse and R.P. Oberreuter observed training on DOE Standard 3009-2014, *Preparation of Nonreactor Nuclear Facility Documented Safety Analysis*, and DOE personnel discussing WIPP's Documented Safety Analysis (DSA) at Carlsbad, NM. During the week of December 19th, Board's staff member D.J. Montieth observed Carlsbad Field Office (CBFO) personnel conducting two Facility Representative (FR) final qualification oral boards.

WIPP DSA. In addition to observing training on DOE Standard 3009-2014, at Carlsbad, NM, the Board's staff observed demonstrations of the DOE Standard 5506-2021 safety analysis process using specific WIPP hazard analysis examples, and discussions of WIPP DSA topics. The training sessions and discussions were attended by WIPP contractor and federal staff from various disciplines, including nuclear safety, fire protection, and operations. Personnel from the Central Characterization Project (CCP) also attended the course. Attendees of the training walked through example hazard scenarios involving a fuel pool fire that impacts a drum array and discussed unmitigated analyses and the importance of protecting assumptions with controls when appropriate. The WIPP DSA topics included the 700C fans, potential future use of lithium-ion battery-powered vehicles in the underground, adding a mine Safety Management Program to the safety basis, and rethinking current limiting conditions of operation in the technical safety requirements that may impede efficient operations. The Board's staff considered the discussions to be frank and open, and personnel appeared to be working hard to resolve areas of potential disagreement.

Final Qualification Oral Boards. A staff member observed two separate final qualification oral boards for FRs. Three personnel had been selected to serve on both qualification boards. The oral board members were professional and adhered to the procedure that governs conduct of the board, questions, and grading of the candidate. The questions covered a variety of topics specific to the facility, including the operability of credited safety systems in the Technical Safety Requirements (TSR), work control, emergency management, FR roles and responsibilities, CBFO oversight planning and execution, mine ventilation system knowledge, methods for ensuring contractor compliance with OSHA requirements, and conduct of operations. Both candidates were successful. Overall, the Board's staff member concluded that the results of the oral boards were satisfactory. The oral board members indicated that they anticipate both candidates will complete the qualification process by mid-January 2023.

Waste Management. As reported in the November 2022 WIPP Monthly Report, NWP resumed receipt of shipments from Idaho National Laboratory (INL). After further investigation INL relaxed its voluntary restriction on shipping containers of compacted waste as long as the containers were (a) overpacked or (b) had been packaged no earlier than January 2019. INL is continuing voluntary restrictions on compacted waste that might contain liquids.