DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 2, 2021

TO: Christopher J. Roscetti, Technical Director

FROM: Alexander Velazquez-Lozada, Cognizant Engineer

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

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

COVID-19 Response. Personnel vaccinations continue at WIPP using a phased approach in accordance with the Centers for Disease Control and Prevention (CDC) guidance; COVID-19 cases appear to be starting to decrease. WIPP continues to monitor staffing levels and meet the minimum requirements to continue operations while maximizing telework, with 4 Carlsbad Field Office (CBFO) staff members providing onsite oversight daily. WIPP continues making progress on scheduled activities for the two-month maintenance outage.

Waste Management. On March 4, 2021, WIPP was notified by the Los Alamos National Laboratory (LANL) that waste containers containing potential pyrophoric material had been shipped to WIPP. The containers were received by WIPP between July 2020 and September 2020 and emplaced in the underground. First reports identified as many as four-five containers, but further investigation narrowed the number to two. After being notified by LANL, WIPP entered condition E of limiting condition of operation (LCO) 3.7.1, Waste Acceptability Control, which required locating the potentially noncompliant containers, suspending waste handling activities (note that WIPP was already in a previously scheduled outage), evacuating the affected area, and completing and implementing a response plan within 10 days. NWP eventually requested a 30-day extension to submit a revised response plan. After further evaluation, WIPP exited LCO 3.7.1, condition E on March 18, 2021, when it was determined that the containers were in compliance with the WIPP Waste Acceptance Criteria when shipped to the site.

Safety Significant Confinement Ventilation System (SSCVS) construction. The SSCVS contractor submitted a non-compliance-report related to concrete walls of the Salt Reduction Building (SRB) that did not meet specifications. The deficiencies observed in the concrete walls included exposed rebar and voids, which require structural repairs. Although the SRB is not credited as safety significant (SS), the dampers located inside the SRB, which isolate the Salt Reduction System in case of a radiological release, are SS. These dampers are at the interface with the safety-significant ventilation system ductwork that connect to the New Filter Building. The SSCVS contractor is currently evaluating options to repair the concrete walls.

Fire Protection. The project to upgrade the site fire protection system continues to progress. Underground water lines have been put in place, including lines for the SSCVS buildings and utility shaft area. A pump-house and a pair of 200,000-gallon tanks that will replace the existing single 180,000-gallon tank are under construction. Eventually, a new fiber-optic network will also be installed to provide more reliable high-speed fire protection system communications.

Underground Ventilation System-700C Fan. WIPP personnel continue analyzing the radiological data collected during January's test and plans a public town hall in April 2021.