

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 4, 2023

TO: Timothy J. Dwyer, Acting Technical Director
FROM: Alexander Velazquez-Lozada, Cognizant Engineer
SUBJECT: Waste Isolation Pilot Plant (WIPP) Report for July 2023

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

Waste Hoist. Carlsbad Field Office (CBFO) personnel reported that the electrical switch stations of two of the three hoists (Waste and Salt Hoists) have periodically been out of service due to inadequate cooling—impacting underground operations. The Waste and Salt Hoists are essential to mission execution, with the Waste Hoist also performing credited safety functions. The Waste Hoist includes safety significant components (i.e., waste hoist brakes) that are credited to control movement of the conveyance, which prevents damage to TRU-Waste Containers that could result in a loss of confinement and the release of radiological material. WIPP is evaluating alternatives to improve cooling capabilities for the Waste and Salt Hoists.

Conduct of Operations. Salado Isolation Mining Contractors, LLC (SIMCO) personnel did not perform a timely bulkhead change to transition from Room 7 to Room 6 at Panel 8, impacting a scheduled shipment of TRU-Waste to WIPP. WIPP management identified contributing causes that included late submittal of work package approval documentation, lack of awareness of the status of Room 7 at Panel 8 at the end of the week, and poor communication between departments. This event would benefit from a formal root cause analysis due to the significant impact to operations and a need to fully understand the nature of the failure to prevent recurrence.

Training and Qualifications. CBFO personnel reported that SIMCO instructors failed to follow procedures during the qualification process for Contact-Handled (CH) Bay Attendants by not administering the exams adequately and not keeping records of who had performed those duties before. The qualification process is intended to ensure CH Bay Attendants receive proper training, requalification/retraining (as needed), and that all records are properly maintained. The CH Bay Attendant function is credited in the WIPP safety basis as a specific administrative control to minimize consequences of certain hazardous conditions. For example, CH Bay Attendants are responsible to monitor liquid-fueled vehicles to reduce the likelihood of vehicle collisions and/or conditions (e.g., fuel leaks) that could lead to a pool fire involving CH Waste.

Hazardous Waste Facility Permit Modification. The New Mexico Environment Department (NMED), in conjunction with the Department of Energy (DOE) and SIMCO, successfully negotiated a settlement agreement on June 19, 2023, with stakeholders who had requested a hearing on the draft ten-year renewal permit for WIPP. To enable public engagement regarding the final renewal permit, NMED will hold a hybrid public meeting on September 22, 2023. As committed to NMED, the comment period will also remain open until September 22, 2023, the date of the public meeting.