

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 5, 2022

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** Alexander Velazquez-Lozada, Cognizant Engineer  
**SUBJECT:** Waste Isolation Pilot Plant (WIPP) Report for July 2022

**DNFSB Staff Activity.** The Board's staff participated in regular conference calls to maintain cognizance of site activities. A. Velazquez-Lozada provided on-site oversight the week of July 25<sup>th</sup>.

**Waste Handling Activities.** As reported in the June 2022 Monthly Report, Nuclear Waste Partnership, LLC (NWP), determined there was a potential inadequacy of the safety analysis (PISA) related to material at risk (MAR) in the Contact Handled (CH-) Bay of the Waste Handling Building. The original concern was whether the number of pallets in the storage area was bounded by the postulated accidents analyzed for the CH-Bay. After further evaluation NWP determined this was not a PISA as the storage of a greater number of loaded facility pallets than the number described in the accident analysis will not increase the calculated radiological consequences. For example, of the 13 or more pallets that could be staged in the CH-Bay, NWP estimates that only 8 pallets will be impacted by event CH-WHB-04-005A, "Collision of Two Electric Powered Vehicles with Subsequent Fire." NWP estimates the number of pallets that will be impacted based on the configuration in which the pallets are staged in the CH-Bay, the size of the pool fire, and the amount of high heat flux. However, the configurations of the pallets that are staged in the CH-Bay are not incorporated in the safety basis. NWP personnel indicated that the number and arrangement of pallets in each accident scenario evaluated are designed to maximize the number of pallets impacted. The Board's staff is evaluating NWP's conclusion.

**Conduct of Operations.** NWP reported a near miss incident where a miner-trainee injured his middle and fourth finger while operating a roof bolter. After the incident, the miner-trainee secured the bolter and notified the Central Monitoring Room (CMR) Operator, Facility Shift Manager, and Underground Facility Engineer. The miner-trainee was evaluated by the Fire Fighters in the underground and brought to surface for further evaluation. A follow-up evaluation the next morning by NWP Medical staff confirmed his release back to work.

**Underground Vehicle Collision.** NWP reported a collision of a Load Haul Dump (LHD) vehicle with bulkhead 74-B-306 at S90 drift, between W170 and W30 drifts. As the LHD operator was returning from transporting salt, the LHD contacted the bulkhead door, damaging the lower quadrant of the door. NWP personnel notified the CMR. The airlock associated with the bulkhead was removed from service. As part of the compensatory measures, NWP implemented a Long-Term Timely Order identifying a haul truck as the preferred method of transporting salt in the W170 and W30 drifts as a haul truck is smaller than an LHD.

**Utility Shaft Project (USP).** On July 17<sup>th</sup> the USP contractor reported a loss of a 480-volt power feed from the switch yard at the shaft site to the CMR. The contractor made personnel working on the USP site aware of the issue. Upon visual inspection the contractor noted two blown fuses caused by a rodent creating a short circuit. On July 18<sup>th</sup> the contractor cleaned the area, replaced the fuses, and performed tests to ensure no other damage was present.