DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 7, 2020

TO: Christopher J. Roscetti, Technical Director

FROM: Alexander Velazquez-Lozada, Cognizant Engineer **SUBJECT:** Waste Isolation Pilot Plant (WIPP) Report for July 2020

DNFSB Staff Activity: There were no Board's staff visits to WIPP this month.

COVID-19 Response. WIPP continues operating in phase two. WIPP continues to receive, process, and emplace TRU waste at a reduced rate of approximately five shipments per week. Due to observed increases in COVID-19 cases in New Mexico and adjacent states, Carlsbad Field Office (CBFO) reduced its on-site oversight and directed Nuclear Waste Partnership, LLC (NWP), to minimize personnel on-site that are not essential for current operations. In August, CBFO plans to start providing dedicated, twice-weekly construction oversight of the Safety Significant Confinement Ventilation System Project and the Utility Shaft Project.

Fire Protection: The facility shift manager shut down all hot work at WIPP due to issues with both of the fire trucks on site. One vehicle had issues with braking/going into gear and the other vehicle was leaking fluids. Both trucks were declared inoperable. NWP was able to secure two trucks in the interim, one each from Eddy County and Ruidoso. The two fire trucks are required under the site hazardous waste permit.

Ground Control: On July 27, WIPP personnel identified indications of roof/rock falls during a routine weekly review of geotechnical instrumentation data. In a further evaluation, on July 29, 2020, NWP identified roof falls in two underground areas. Both areas are prohibited and inaccessible to personnel. In one of the areas NWP identified some damage to a bulkhead, and in the other area NWP did not identify damage to any equipment or additional structures.

Underground Vehicle Automatic Fire Suppressions Systems (AFSS): During a walkdown of the underground, CBFO personnel identified adverse conditions related to the AFSSs on some vehicles. AFSSs detect and suppress fires in the incipient stages associated with potential fuel and hydraulic line leaks from the vehicles. One of the vehicles did not have an AFSS system installed; on another vehicle the AFSS was out of service; and two vehicles had AFSSs for which maintenance had only been partially completed—they had been returned to service but required the presence of a fire watch. CBFO personnel discussed these observations with the NWP Fire Protection staff. NWP reported their subcontractor for the AFSS is providing additional resources to complete the maintenance work.

Waste Handling Building (WHB) Battery Exhaust System: On July 2, 2020, the Central Monitoring Room Operator (CMRO) received two consecutive alarms for low differential pressure (DP) on the filter bank associated with the WHB Battery Exhaust System. The WHB Battery Exhaust System mitigates the consequences of radiological material releases by filtering air that could potentially bypass the WHB Confinement Ventilation System prior to its release to the environment. Further investigation identified that the second stage DP pressure lines were partially blocked. The lines were purged and the local pressure gauge and the pressure transmitter were recalibrated. There were no indications of a radiological release.