

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 2, 2018

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** Alexander Velazquez-Lozada, Cognizant Engineer  
**SUBJECT:** Waste Isolation Pilot Plant (WIPP) Report for October 2018

**DNFSB Staff Activity:** A. Velazquez-Lozada observed the WIPP Air Quality and Ventilation Workshop and performed a walkdown of the underground facilities. R. Quirk provided routine oversight. A. Velazquez-Lozada and S. Thangavelu observed the National Transuranic (TRU) Program (NTP) Corporate Board General Session Meeting at Denver, CO. Staff oversight during fiscal year 2019 averaged to 2 person-weeks/month.

**Air Quality and Ventilation.** NWP reported a case where underground workers were exposed to unsafe levels of sulfur dioxide. They also reported two cases where workers on the surface were exposed to unsafe levels of carbon tetrachloride while unpacking waste. At the WIPP Air Quality and Ventilation Workshop, NWP staff identified immediate compensatory measures in areas of low air flow in the underground as well as long term actions. Carlsbad Field Office (CBFO) personnel discussed the possibility of restarting the 700 series fans in the unfiltered exhaust path to provide more airflow to the underground prior to the startup of the Safety Significant Confinement Ventilation System (SSCVS). Until WIPP controls the loose contamination in the underground, it is not clear that operating unfiltered underground ventilation is consistent with the requirements in DOE Order 420.1C, *Facility Safety*.

**Maintenance.** As reported last month, the Board's staff identified problems with maintenance of underground vehicles during a walkdown of the underground facilities. On October 16, 2018, the Board's staff conducted a follow-up teleconference with WIPP personnel to discuss the Out of Service (OOS) processes. NWP reported that they completed corrective actions for some of the staff-identified deficiencies and completed an extent of condition assessment of the OOS processes and procedures. However, NWP did not address some of the Board's staff specific inquiries in the agenda for the teleconference. The Board's staff requested additional information and continues to evaluate the adequacy of the OOS processes.

**Conduct of Operations.** NWP declared a technical safety requirement (TSR) violation due to the improper performance of the semiannual surveillance test of the automatic fire suppression system on an underground waste transporter. The transporter was used at least twice after the expiration of the prior surveillance test.

**Waste Management.** WIPP did not perform any waste handling or emplacement activities during the last two weeks of October as a result of industrial health concerns in the underground and in the Contact Handled (CH) Bay. This is among the reasons waste has not been emplaced since October 11<sup>th</sup>. Waste in the CH Bay is at the maximum level allowed by the hazardous waste facility permit. The Office of the NTP paused additional waste shipments to WIPP until emplacements restart.