

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 7, 2024

**TO:** Timothy J. Dwyer, Technical Director  
**FROM:** Erin A. McCullough, Cognizant Engineer  
**SUBJECT:** Waste Isolation Pilot Plant (WIPP) Report for May 2024

**DNFSB Staff Activity.** The Board's WIPP cognizant engineer held weekly meetings to maintain awareness of site activities. On May 15, 2024, the Board transmitted a letter to Department of Energy (DOE) Secretary Granholm that concluded Salado Isolation Mining Contractors, LLC (SIMCO) has not demonstrated that the final design of the continuous air monitor system for the WIPP Safety Significant Confinement Ventilation System (SSCVS) can perform its safety function in an environment with combustion products from fire and salt particles from mining activities. DOE is reviewing the letter and developing a response.

**Ongoing Safety Culture Challenges.** Significant operational incidents persisted at WIPP following the safety stand-down in April (see report for April 2024). On April 26, 2024, maintenance personnel replaced a shaft, impeller, and seal without an approved work package covering the scope of work for an electric fire water pump that is credited in the WIPP technical safety requirements as part of the Waste Handling Building fire suppression system. The work occurred without a job hazards analysis to identify necessary safety controls and personal protective equipment, and without confirmation that the replacement parts had the correct quality assurance pedigree. On May 20, 2024, a reportable near-miss incident occurred when a waste handling crew used two forklifts instead of a crane to reposition multi-ton calibration weights in the Parking Area Unit without an approved work package, hoisting and rigging analysis, job hazards analysis, pre-job brief, or shift supervisor's awareness. The forklift sling broke while rotating a six-ton weight, causing the weight to fall on its side and a shackle to fly a significant distance away from the forklifts, past the spotter. SIMCO management paused all non-routine work from May 23-28, 2024, after a bolter contacted an electrical box near the Exhaust Shaft, causing a loss of function to Bulkhead 336, inoperability of sump pumps, and a reportable event due to exposure of hazardous energy. Following the pause, the SIMCO president met with all first-line supervisors to discuss the relationship between safety and productivity. The DOE Carlsbad Field Office (CBFO) is considering formal mechanisms to transmit to SIMCO its concerns about the trend of unsafe work practices at WIPP. The Board's staff will continue monitoring progress with improving the safety culture at WIPP.

**Construction Activities Complete at SSCVS.** As of May 24, 2024, all construction activities were complete at the SSCVS. The next phase of the project includes commissioning testing for all systems and training site personnel to proficiently operate the facility. The tentative date for turnover from the construction subcontractor to SIMCO is August 26, 2024.

**CBFO Surveillance for Lockout Tagout (LOTO).** CBFO managers are revamping the WIPP Integrated Oversight Schedule, which has quarterly surveillance requirements. A CBFO oversight team completed a LOTO surveillance in February 2024 that observed strengths with worker-level program knowledge and opportunities to clarify written procedures. SIMCO personnel have made progress with incorporating the feedback to improve the LOTO program over the last three months.