

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 2, 2025

TO: Acting Technical Director
FROM: WIPP Cognizant Engineer
SUBJECT: Waste Isolation Pilot Plant (WIPP) Report for April 2025

DNFSB Staff Activity. The WIPP and National Transuranic Waste Program cognizant engineers held weekly meetings to maintain awareness of mining and waste handling activities.

On March 28, DNFSB staff transmitted an agenda to review the performance of the Underground Ventilation System (UVS), previously referred to as the Safety Significant Confinement Ventilation System (SSCVS) project. On April 10, DNFSB staff completed a teleconference with Carlsbad Field Office (CBFO) and Salado Isolation Mining Contractors, LLC (SIMCO) personnel to discuss the start-up approach, safety basis implementation, and testing of safety significant components and clarify the lines of inquiry.

DNFSB staff were onsite from April 22 to 24 to observe the federal readiness assessment (FRA) for the startup of the UVS. The staff team observed two performance demonstrations, an emergency drill, and various interviews of CBFO and SIMCO personnel. The two performance demonstrations included operation of the UVS in direct filter mode and calibration of the high-efficiency particulate air (HEPA) filter differential pressure gauges. The staff team also observed interviews related to nuclear safety, contractor assurance, training, quality assurance, waste management, industrial safety, operations, radiological control, and emergency preparedness. Additionally, on May 1, DNFSB staff virtually attended the FRA team's exit brief.

Underground Ventilation System (UVS)–Readiness. From April 22 to May 1, an FRA team was onsite to conduct a review of the UVS. The review was performed by an external team of eight subject matter experts. The FRA team assessed 13 objectives by observing fieldwork for eight scheduled activities and an emergency drill, as well as conducting over 65 interviews. On May 1, the team completed the onsite portion of their assessment and provided an outbrief of the initial results to site management. The FRA team identified one pre-start finding and seven post-start findings. The findings related to evaluating potential radiological hazards associated with increased airflow, staffing levels for federal field oversight (e.g., facility representatives), and improving emergency response efficiency. The FRA team concluded that both SIMCO and CBFO have adequately demonstrated the readiness of equipment, procedures, and personnel to start up UVS operations.

Utility Shaft Construction Project Work Status. In April, Harrison Western Shaft Sinkers JV, LLC (HWSS) continued to perform demobilization work at the Utility Shaft project site. Additionally, two new mine fans, which will supply air into the WIPP underground via a connection to the utility shaft plenum, were lifted and bolted into place. Lastly, efforts to stop water inflow into the Utility Shaft through a construction joint in the concrete liner are underway (see WIPP Monthly for February 2024). Site personnel performed testing to determine inflow location(s) and rates as well as water chemistry to determine a suitable grout mix. The concrete liner grouting work is planned for May.