DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 6, 2025

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

Positive Unreviewed Safety Question Determination (USQD). On April 3, Carlsbad Field Office (CBFO) and Salado Isolation Mining Contractors, LLC (SIMCO) personnel were notified by Savannah River Site (SRS) personnel that two Criticality Control Overpack (CCO) containers were assembled and shipped to the WIPP site with expired Criticality Control Container (CCC) lid gaskets. The CCO consists of a gasketed stainless-steel container inside a standard 55-gallon drum. Gaskets are a primary part of the confinement system. They are required to have at least 50% of their shelf life remaining at the time the CCO leaves the fabricator and must be installed on the CCC before shelf-life expiration. The CCO gaskets have a shelf life of five years. Following this discovery, SIMCO nuclear safety and operations management personnel paused CCO processing and rescheduled waste shipments from SRS. On April 10, SIMCO personnel entered the Potential Inadequacy of the Safety Analysis (PISA) determination process. They declared a positive USQD on April 28. This event is being tracked in the Occurrence Reporting and Processing System under occurrence report number EM-CBFO-SIMC-WIPP-2025-0004. On May 15, while performing the Evaluation of the Safety of the Situation (ESS), SIMCO was notified by SRS of another twelve containers, already emplaced at WIPP, where the CCC gaskets had been reused—prohibited by the manufacture's specification for use. SIMCO personnel incorporated this new information into the ESS. On May 19, SIMCO personnel lifted the SRS waste shipment pause after determining that all identified CCOs, with expired or reused CCC gaskets, were placed on hold.

Utility Shaft. On May 27, subcontractor personnel commenced grouting work to repair a water leak near a construction joint in the concrete liner of the Utility Shaft (see WIPP Monthly for April 2025). Workers were working on the galloway work platform in the shaft and began drilling holes into the shaft wall to create injection ports for grouting. During this activity, an approximately 4-foot by 1-foot by 6-inch section of concrete liner spalled and fell approximately 1,400 feet to the bottom of the shaft. No workers were injured, and no equipment was damaged. Additionally, no workers had access to the underground or below the galloway during this work activity. Following this event, Utility Shaft repair work was halted. SIMCO along with various subcontractors are evaluating preventive measures to limit additional spalling during the grouting process.

Underground Ventilation System (UVS)–Readiness. On May 22, SIMCO transmitted a letter to CBFO documenting closure evidence for the pre-start finding identified during the federal readiness assessment (FRA), as well as the corrective action plans for the closure of the post-start findings (see WIPP Monthly for April 2025). Additionally, closure evidence for two of the three pre-start items, identified by SIMCO outside of the FRA, were provided, and the third will be provided after the authority to operate is issued. This letter served to document the closure of pre-start issues and the identification of corrective actions for post-start issues identified in DOE Order 425.1D chg. 2, *Verification of Readiness to Startup or Restart Nuclear Facilities*.