

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 5, 2024

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

DNFSB Staff Activity. The Board's Vice Chair and cognizant engineer attended the WIPP 25th Anniversary of First Waste Receipt ceremony in Carlsbad, NM on March 26, 2024. Later that week, a staff team visited WIPP for fire protection oversight.

Corrective Actions for Improving Safety Culture at the Utility Shaft. On February 8, 2024, Salado Isolation Mining Services, LLC (SIMCO) lifted a stop work order against their subcontractor, Harrison Western Shaft Sinkers JV, LLC (HWSS), after HWSS implemented corrective actions to prevent near-miss operational incidents from recurring at the Utility Shaft. The cognizant engineer reviewed the corrective actions and discussed their effectiveness with SIMCO leadership this month. A notable corrective action involved retaining a safety culture expert to conduct monthly facilitated discussions with HWSS crews to reinforce expectations for identifying concerns regarding unsafe circumstances. While the stop work order was in effect, HWSS crews also participated in a comprehensive review of Utility Shaft work procedures. HWSS management intended these two corrective actions to drive safety improvements through worker-level engagement. The Board's cognizant engineer discussed the benefit of applying tracking, trending, or other analytical efforts to assess corrective action effectiveness with SIMCO management, since these mechanisms have not yet been programmatically implemented.

Safety Significant Confinement Ventilation System (SSCVS) Quality Assurance Concerns. The SSCVS is undergoing commissioning testing to ensure the safety and reliability of systems prior to bringing them into service. In January 2024, site personnel flushed the SSCVS fire water loop, a pre-requisite for system commissioning, causing an installed fire hydrant to dislodge into the air shortly after site personnel introduced standard water pressure. The investigation report described multiple quality assurance issues, such as differential bolt tightening and improper installation methods, though no corrective actions specifically addressed the shortcomings evident in the quality assurance program. During a facility walkdown of the SSCVS fire water loop, the Board's staff team expressed concerns to SIMCO fire protection personnel about the missing quality assurance component in the corrective actions.

Event Learning Review (ELR) for Potential Shock Event. On March 18, 2024, a Board's staff team observed the ELR following a potential personnel shock event at the Waste Handling Building. An ELR is an issue investigation meeting for managers to understand what occurred during an incident, which precedes causal and corrective action analyses. The staff team thought that the effectiveness of the ELR could have been improved by assigning qualified personnel to investigate the area in question before the meeting, ensuring pictures of the environment were available, and fully describing the configuration of the environment.

Planned Maintenance Outage Complete. Waste shipments to WIPP resumed the week of March 12, 2024, after site personnel performed nearly 150 maintenance activities during the annual planned maintenance outage, which lasted six weeks.