DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 4, 2022

TO: Christopher J. Roscetti, Technical Director

FROM: Alexander Velazquez-Lozada, Cognizant Engineer

SUBJECT: Waste Isolation Pilot Plant (WIPP) Report for February 2022

DNFSB Staff Activity. The Board's staff participated in regular conference calls to maintain cognizance of site activities.

Mining and Ground Control. Nuclear Waste Partnership, LLC (NWP), closed Room 2 of Panel 7 and commenced emplacing waste in Room 1, which is the last open room in Panel 7. Once Room 1 is full, NWP will start emplacing waste in Panel 8. NWP completed mining Panel 8 to its required dimensions and plans to complete preparation of Panel 8 this summer. NWP also continues mining the South 850 drift and has begun mining the South 700 drift as part of the mine expansion to the west and future connection to the new Utility Shaft.

Underground Ventilation System. As reported in the January 2022 Monthly Report, NWP shut down the 700C fan for repairs after having problems with the deterioration of the silencer-baffle downstream of the fan. NWP has completed repairs and returned the fan to service with the remanent of the silencer-baffle removed from the ductwork. Concurrently, NWP continues to have difficulties with the three continuous air monitors (CAM) installed at the waste face of Panel 7. These CAMs send a signal to an operator to shut down the 700C fan, which provides unfiltered ventilation, upon detection of a radiological release in an active open panel (presently Panel 7). Having the three CAMs functioning and operating satisfactorily is a nuclear Technical Safety Requirement to start-up the unfiltered 700C fan. Some of the issues rendering the CAMs out of service were accelerated corrosion and excessive salt build-up in the vacuum pump filter. NWP was able to repair the three CAMs during this reporting period and is further evaluating issues affecting CAM operability.

Conduct of Operations. The NWP subcontractor of the Utility Shaft Project reported a near miss event when a ten-ton capacity chain-hoist (chain-fall) dropped and impacted the ground approximately fifteen feet from operators working at the shaft. The subcontractor determined that a nylon sling failed, allowing the chain-fall to drop. The subcontractor suspended work after the event and notified the NWP Facility Shift Manager (FSM) and the Operations Manager. The initial investigation by the sub-contractor identified that personnel were using incompatible equipment. After suspending work, the sub-contractor secured the area, and started to further evaluate the event.

As reported in the December 2021 Monthly Report, NWP personnel paused waste handling activities after discovering that an Inner Containment Vessel ventilation port plug was missing from a TRUPACT shipping container that originated from Los Alamos National Laboratory (LANL). After further evaluation, NWP found that the shipment in question was not in compliance with the Certificate of Compliance issued by the Nuclear Regulatory Commission when it was received at WIPP. NWP personnel notified NWP and CBFO management of the findings as well as NWP Subject Matter Experts. NWP also initiated an internal evaluation to identify opportunities for improvement at LANL and WIPP.