DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 1, 2022

TO: Christopher J. Roscetti, Technical DirectorFROM: Alexander Velazquez-Lozada, Cognizant EngineerSUBJECT: Waste Isolation Pilot Plant (WIPP) Report for March 2022

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

Flammable Gas Analysis of Transuranic Waste Containers. The Central Characterization Program (CCP) of Nuclear Waste Partnership, LLC (NWP), discovered that a waste container from Los Alamos National Laboratory had been emplaced in Panel 7 without undergoing a Flammable Gas Analysis (FGA). The FGA is performed by CCP and is required by the Nuclear Regulatory Commission for shipping, as well as by the WIPP Waste Acceptance Criteria for emplacement. The FGA determines the concentration of flammable gas/volatile organic compounds in the headspace of a waste container intended for shipment to WIPP. Upon receiving the notification, NWP entered Limiting Condition for Operation (LCO) 3.7.1, Waste Acceptability Control, Condition E, which requires NWP to immediately suspend waste handling activities and evacuate the affected area and implement a response plan within 10 days. Upon further evaluation, CCP determined that the contents of the emplaced waste did not pose a safety risk. Therefore, after meeting the required actions under the LCO, NWP exited Condition E and resumed waste handling activities. As part of the event investigation, CCP is currently performing a root cause analysis. In addition, CCP is briefing other transuranic waste generator sites to reinforce safety and to ensure all containers being shipped to WIPP have proper FGA documentation before shipment.

Vehicle Incidents. Two incidents involving vehicles occurred at WIPP during this reporting period. One incident occurred in the underground and the second at the surface in the Parking Area Unit (PAU). The incident in the underground involved a haulage truck striking a wall in the mine when turning a tight corner-causing a fuel line to pull loose. When discovered, the operator of the truck immediately stopped the truck and reported the incident to the Facility Shift Manager. An Event Learning Review was conducted shortly thereafter in the underground to gather facts and statements from the personnel involved. The second event involved a trailer with empty TRUPACTs that disconnected from the trailer-jockey while being repositioned in the PAU south of the Waste Handling Building. The trailer suffered damage to a non-structural component but the empty TRUPACTs on the trailer did not suffer any damage. The investigation by NWP revealed there were no problems with either the king pin ball or the trailer jockey. The operator in the trailer jockey may have accidently activated a switch to disengage the trailer from the trailer-jockey prior to movement, or the trailer may not have been adequately hooked to trailer-jockey's fifth wheel. NWP paused work and reviewed applicable procedures to verify their adequacy. NWP performed briefings to waste handlers to ensure a proper understanding of methods for hooking up trailers to the trailer-jockey in the PAU.

Emergency Preparedness. The WIPP Emergency Response Organization (ERO) conducted a drill on March 30th. This drill is part of a series conducted periodically to assure that the site and emergency response personnel are adequately trained in the event of an emergency at WIPP.