DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 2, 2018

TO: Steven A. Stokes, Technical Director
FROM: Christina T. Beaty, Cognizant Engineer
SUBJECT: Waste Isolation Pilot Plant (WIPP) Report for January 2018

DNFSB Staff Activity: C. Beaty and R. Quirk completed a staff visit to WIPP for general employee training and routine oversight. Staff oversight during FY-2018 has averaged 1.7 person-weeks/month.

Safety Basis. CBFO still has some remaining open items before they approve the safety evaluation report for Documented Safety Analysis and Technical Safety Requirements (TSR) revision 6. WIPP also declared a Potential Inadequacy in the Safety Analysis due to the lack of TSR controls limiting the number of vehicles with < 29 gallons of combustible liquids and no automatic fire suppression system that can be present within 200 feet of the waste face.

Waste Storage. Early this month, the waste containers held in the contact handled (CH) Bay, including those remaining from 2014, were downloaded and disposed in Panel 7. Following the events in 2014, CH waste containers were stored in the CH Bay of the Waste Handling Building. Some of these waste containers could not be downloaded until the Basis of Knowledge (BOK) was updated and the waste in the containers was evaluated to ensure it met requirements in the BOK. WIPP verified that the remaining waste met the revised BOK requirements and downloaded the remaining waste containers.

Maintenance Outage. WIPP conducted a planned two-week maintenance outage, which included sealing the floor in the CH Bay with an epoxy coating, hoist maintenance, ventilation systems filter replacements, and ground control activities. WIPP was unable to perform one significant task on the outage schedule – milling the floor and bolting in the E-300 exhaust drift, to enable WIPP to install cribbing in E-300 and complete closing the south end of the mine.

Supplemental Ventilation System (SVS) Start-Up. CBFO has given Nuclear Waste Partnership, LLC (NWP), permission to run the SVS system with the expectation that NWP continues to conduct testing to determine the system's impact to underground ventilation. These restricted operations require additional oversight until NWP has provided a corrective action plan for the outstanding issues remaining from the federal readiness assessment (see October 2016 monthly report). The SVS was run under restricted conditions for a short duration to enable a kick-off of mining in panel 8. NWP has now tested the underground ventilation system (UVS)/SVS interlock with all three UVS fans, to ensure that SVS will trip if the operating UVS fan trips.

Freeze Prevention Issues. Despite having a history of being challenged by freeze protection and a winter readiness procedure, WIPP has not effectively implemented the corrective actions that prevent line freezes and damage to equipment. In early January, WIPP experienced low temperatures that resulted in multiple fire protection line breaks. WIPP's decontamination trailer water line froze, rendering the decontamination trailer inoperable. WIPP's previous decontamination trailer froze three years ago.