DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 2, 2021

TO: Christopher J. Roscetti, Technical Director
FROM: Alexander Velazquez-Lozada, Cognizant Engineer
SUBJECT: Waste Isolation Pilot Plant (WIPP) Report for June 2021

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

Response during COVID-19. WIPP personnel continue to telework but are gradually increasing onsite presence. WIPP continues to receive waste at a reduced rate with expectations to increase the shipping rate in July.

Waste Management. On May 27, 2021, Nuclear Waste Partnership, LLC (NWP), notified Carlsbad Field Office (CBFO) that two shipments en route to the WIPP site from Idaho National Laboratory (INL) contained duplicate package number data. These shipments were stopped en route pending a decision on what action should be taken. CBFO, NWP and INL determined that the data for one of the shipments was correct and this shipment was directed to resume transit to WIPP. The other shipment was determined to have erroneous (duplicate) data and was directed by CBFO to return to INL. The data error was caused by an issue with the Waste Data System (WDS) software. NWP is currently working on a software revision to correct this issue. Until the software is fixed, WDS administrators will run a script designed to find any duplicate shipment data, prior to approval of shipments to depart for WIPP.

Waste Containers. A waste packaging maintenance vendor notified NWP of a deficiency related to the annual helium leak test. Not all performance test requirements were being completed in accordance with the conditions specified in the TRUPACT-III Safety Analysis Report and Certificate of Compliance issued by the Nuclear Regulatory Commission. The vendor's implementing procedure states that the required torque for the closure lid bolts under test conditions is 1,180 ft-lbs. Contrary to this, the vendor reported that they have been torqueing the closure lid bolts to 590 ft-lbs. NWP and the vendor are completing an extent of condition review; repeating tests; and verifying tests comply with torque requirements.

Nuclear Safety Basis. CBFO approved Documented Safety Analysis (DSA) Revision 7a, Page Change 2, primarily to allow for underground unfiltered ventilation when waste disposal is not being performed. NWP had re-examined the hazard analysis and identified additional events to account for accidents and events that could occur during unfiltered ventilation activities. The newly identified events resulted in the identification and selection of additional controls. Some of those controls require continuous air monitors at the active panel and actions to shut down the unfiltered 700C fan upon detection of an underground radiological release.

Fire Protection. During routine oversight, CBFO identified multiple underground automatic fire suppression system cylinders have salt encrustation covering the spray head. The encrustation could prevent system actuation, or delay system actuation if heat transfer to the spray head is slowed. CBFO is recommending adding additional inspection and maintenance requirements to the semi-annual/annual fire system inspection and maintenance procedures.