

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 7, 2017

TO: Steven Stokes, Technical Director
FROM: Leigh Lin, WIPP Cognizant Engineer
SUBJECT: Waste Isolation Pilot Plant (WIPP) Report for June 2017

DNFSB Staff Activity: R. Quirk was on site performing routine oversight June 5-8. L. Lin was onsite June 6-8 to complete training and for site familiarization. On June 20, the Defense Nuclear Facilities Safety Board's (Board) staff conducted a closeout teleconference with the site on the Radiation Protection Program Review. Staff oversight during FY-2017 has averaged 3.4 person-weeks/month.

Improper Storage of Combustibles. On March 16, 2017, several drums of spent oil and diesel fuel were found in a location of the underground that was not designated as a fuel and oil storage area. Underground fuel and oil storage areas are a design feature in the WIPP Technical Safety Requirements, whose safety function is to provide adequate separation distance between combustible liquids and waste to preclude a pool fire or explosion from affecting the waste. The containers had been accumulating in the contamination area and Panel 7 of the underground for several months. The contractor notified the Carlsbad Field Office on of this on May 22. The spent oil and diesel have since been removed, and the contractor declared a Potential Inadequacy of the Safety Analysis on June 15, and concluded it was an unreviewed safety question.

Electrical Safety. In the past month, WIPP has experienced several electrical safety issues. On June 11, an electrician observed a spark when keys attached to a lanyard around the worker's neck came in contact with an energized control panel door while doing work to replace a breaker in Substation 3. On June 15, an electrician performing work on an elevator control door inside an arc flash boundary was not wearing all the required personal protective equipment. On June 21, a Mine Safety and Health Administration inspector found an uncontrolled hazardous energy source in an electrical power distribution enclosure. These events were reported in the Department of Energy's (DOE) Occurrence Reporting and Processing System. Operations Management issued a work pause on all electrical maintenance until corrective actions are completed.

Work Planning and Control (WP&C). During maintenance work on a breaker, work was not documented in the work status log per the procedure, a work change notice to allow the work was processed after the work had already been performed, and some steps were re-performed when the problem was not solved initially (even though the work document does not include allowance for repeating earlier steps). Similar problems have been identified in the past, as well as other WP&C issues, including lockout/tagout issues and instances where hazard control development was not done and job hazard analysis was not in compliance with DOE's Integrated Safety Management policy.

Ground Control. The contractor has continued to bolt and perform routine ground control activities in the contaminated areas and the disposal transport path. The contractor has met its bolting goal of 110 bolts/week only once during the month of June.