

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 3, 2017

TO: Steven Stokes, Technical Director
FROM: Anthony Battaglia, WIPP Cognizant Engineer
SUBJECT: Waste Isolation Pilot Plant (WIPP) Report for January 2017

DNFSB Staff Activity: D. Winters observed initial waste emplacement activities during January 4-6. R. Quirk and A. Battaglia were onsite conducting routine oversight during January 9-13 and also supported a January 11 WIPP visit by Board Members J. Roberson and D. Santos. Staff onsite oversight during FY-2017 has averaged 3.9 person-weeks/month.

Waste Emplacement Activities. Transuranic waste emplacement resumed on January 4 for the first time since the salt truck fire and radiological release in February 2014. The staff observed underground portions of the initial waste emplacement in Panel 7. The contractor emplaced waste on four additional days this month. Members of the Carlsbad Field Office (CBFO) staff identified multiple relatively minor procedural non-compliances (e.g., performing steps out of order, or skipping steps) during the waste emplacement activities. The Board's staff will continue to closely follow waste emplacement activities.

Technical Safety Requirements (TSR) Implementation. The contractor incorrectly categorized a missed TSR surveillance requirement as non-reportable, but appropriately re-categorized it as a TSR violation after discussions between CBFO and contractor management. A member of the Board's staff also questioned if the implementation of a specific administrative control during waste emplacement was consistent with the TSR requirements. CBFO worked with the contractor to modify the process so that it became clearly consistent with the requirements. The Board's staff is following CBFO's efforts to ensure the TSR controls are implemented.

Ground Control. A CBFO facility representative reported transverse fractures in the back (roof) of the cross-drift leading to Panel 7. Contractor geotechnical staff evaluated the fissures and reported to CBFO that there was little danger from these cracks, but they installed additional roof bolts for improved worker safety. The contractor continues to emphasize stabilizing Panel 7 for waste emplacement. The Board's staff continues to monitor progress of stabilizing the WIPP ground conditions as well as isolating the southern portion of the underground.

Permanent Ventilation System (PVS). The project has reached the 75% design stage and the Board's staff discussed the status with project personnel. The system, when operational, will provide sufficient airflow and filtration capacity to support simultaneous waste emplacement and mining operations. PVS project personnel presented reasonable safety strategies for switching to filtration mode except for the planned location of continuous air monitors (CAMs). The identified panel exhaust drift locations for the CAMs may not be adequate for the timely detection of a contamination release during underground waste transport as well as prevention of contamination from entering the salt de-dusting system.