

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 5, 2018

TO: Steven A. Stokes, Technical Director
FROM: Christina T. Beaty, Cognizant Engineer
SUBJECT: Waste Isolation Pilot Plant (WIPP) Report for December 2017

DNFSB Staff Activity: C. Beaty, K. Deutsch, and R. Quirk completed a staff visit to WIPP on December 1st. There were no additional staff visits for the month of December. C. Beaty, K. Deutsch, J. Pasko, and R. Quirk held a close out teleconference with WIPP on December 14th for the safety instrument alarm system review. Staff oversight during FY-2018 has averaged 1.7 person-weeks/month.

Mining Maintenance. The Panel 7 Room 6 convergence rates have reduced, indicating that the roof fall is no longer an imminent concern. The Carlsbad Field Office (CBFO) hosted Department of Energy (DOE) Office of Environmental Management and Department of Labor (DOL) Mine Safety and Health Administration (MSHA) personnel on site for an evaluation of the underground. The group spent time with the mine recovery team, geotechnical group, CBFO oversight employees, Nuclear Waste Partnership, LLC (NWP), Management, and a few miners from WIPP. The MSHA technical support staff conveyed concerns with the long term plan for sustaining the mine. MSHA made a recommendation related to WIPP improving its resource identification and allocation for the ground control efforts, including personnel, equipment, and airflow. Mine airflow is currently the most limiting resource.

Underground Ventilation System (UVS) Series 860 Mine Fan Reliability. The 860 fan maintenance has been an ongoing issue (tracked in monthly reports since July) due to WIPP's ineffectiveness in addressing key maintenance issues. WIPP completed maintenance, balanced, and is running the 860C fan. The 860A and 860B fans showed excessive vibrations.

Supplemental Ventilation System (SVS) Start-Up. CBFO has not given NWP permission to run the SVS system for normal operations. CBFO has outstanding issues with the mine ventilation plan documentation for the configuration with the SVS operating. Additionally, NWP has not yet tested the UVS/SVS interlock with the 860C fan as the in service UVS fan, to ensure that SVS will trip if the 860C fan trips. This interlock is designed to prevent unexpected air flow conditions that may result from SVS operating without any UVS fan running. SVS will not be run in conjunction with the 860C fan until the interlock tests are completed satisfactorily.

Documented Safety Analysis (DSA) Revision 6. CBFO held a Senior Independent Review of DSA and Technical Specifications Requirements (TSR) revision 6. CBFO has two remaining open conditions of approval, but expects revision 6 to be approved in January. The Board's staff plans to review DSA and TSR revision 6 once they are finalized.

TRUPACT-II Venting Deadline Exceeded. WIPP violated the Nuclear Regulatory Commission (NRC) requirement to vent a controlled waste package within ten days of its closure prior to shipping. WIPP reported to the NRC that WIPP had exceeded the required time period because of administrative errors. Corrective actions are being taken to prevent recurrence.