

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 6, 2018

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

DNFSB Staff Activity: C. Beaty, T. Hunt, S. Seprish, and B. Sharpless visited WIPP to review WIPP's maintenance program. R. Quirk was at WIPP for a week of routine oversight. Staff oversight during FY-2018 has averaged 2.4 person-weeks/month.

Safety Significant Confinement Ventilation System (SSCVS) Design Process. In a letter dated March 26, 2018, the Board communicated concerns that the final design of WIPP's SSCVS does not include integration of the underground continuous air monitoring (CAM) system. DOE's Carlsbad Field Office (CBFO) considers the interface between the SSCVS and the CAMs, which are expected to provide the actuation signal to realign the system into a safe condition in the event of a radiological release, to be outside of the design project scope.

Ground Control. CBFO identified and declared a stop work for operations in the south end of the underground due to an excessive number of broken roof bolts which indicates a lack of maintenance of the ground support systems. The stop work was lifted once the area of concern was declared off limits. A quarterly Mine Safety and Health Administration (MSHA) inspection in other areas of the underground indicated that there have been some improvements in underground ground control and it appears that WIPP is addressing some of MSHA's citations.

Computerized Maintenance Management System (CMMS). WIPP is challenged by an outdated CMMS that requires numerous upgrades to support WIPP's current operational requirements and integrate maintenance and work planning. Due to technical difficulties with the planned upgrades stated in the Nuclear Waste Partnership, LLC (NWP) August 2016 revised project plan, a full replacement is likely required, but is currently cost prohibitive due to funding constraints. The project has not yet commenced, despite that the plan called for completion of the upgrade to more efficient business processes by December 2017.

NWP's work control department recently issued a communique titled "T-4 Schedule Communication," which describes how WIPP will increase the rigor applied to planning and coordinating work, starting four weeks prior to the actual initiation of work (i.e., T-4), in an effort to address some of WIPP's maintenance coordination and execution challenges. The communique establishes responsibilities and expectations for the department that is assigned work tasks and the departments required to support any work tasks for the specific week. The communique establishes a schedule for preparing work tasks, including documentation, lockouts/tagouts, performing walkdowns, ensuring parts availability, identifying and scheduling any required support, and analyzing the hazards.

Unplanned Bus Outage. WIPP experienced a B bus outage, due to an overcurrent condition. The unplanned bus outage resulted in a loss of the waste hoist and some central monitoring room indications, until the loads could be manually transferred.