

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 3, 2017

TO: Steven Stokes, Technical Director
FROM: Chris Beaty, WIPP Cognizant Engineer
SUBJECT: Waste Isolation Pilot Plant (WIPP) Report for October 2017

DNFSB Staff Activity: A. Martin, J. Pasko, and R. Quirk were on site the week of October 2nd to provide routine oversight, observe the Federal Readiness Assessment (FRA) of the Supplemental Ventilation System (SVS), and support the Vice Chairman's visit. D. Winters was on site the week of October 23rd for routine oversight, to conduct site access continuing training, and observe the annual emergency exercise. Staff oversight during FY-2018 has averaged 3 person-weeks/month.

Supplemental Ventilation System Federal Readiness Assessment. DOE concluded the FRA for SVS operations, identifying two pre-start findings and five observations. DOE recommended that WIPP, within a month of the SVS becoming operational, develop a schedule to resolve three of the observations. The FRA final report notes, "It is evident...that WIPP is not funded to consistently maintain the systems that support safe waste emplacement, such as ground control and SVS. Increased waste emplacement rates will likely require a commensurate increase in maintenance prioritization and management attention in this area."

Basis of Knowledge (BOK) for Downloading Waste in Contact Handled (CH) Bay. The WIPP's hazardous waste facility permit limits the number of facility pallets in the CH bay to 13. WIPP has revised the BOK and has obtained approval to allow some of the pallets that have been stored in the CH bay since before the February 2014 release to be downloaded.

Anticipated Roof Fall. The contractor continues to monitor the Panel 7 Room 6 convergence rates and is developing guidance for restricting operations when the convergence rates reach an unacceptable level. WIPP issued a long term timely order that addresses actions the site should consider if the roof fall occurs.

Annual Full Participation Emergency Exercise Observation. A Board's staff member observed WIPP's annual emergency exercise from the emergency operations center. The exercise scenario was fairly challenging and included a radiological release.

Series 860 Mine Fan Reliability. Series 860 fan maintenance has been an ongoing issue (tracked in monthly WIPP reports since July) due to WIPP's ineffectiveness in addressing key maintenance issues. Only the in-service 860B fan is fully operational. The 860A fan has been out of service for several months due to extensive maintenance and the 860C fan is only considered available for emergency use, for example to support evacuation of underground personnel in the event that the in-service fan fails. One of the three safety-significant 860 series mine exhaust fans is required to provide the baseline airflow for WIPP's HEPA filtered underground ventilation system.