

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 5, 2016

TO: Steven Stokes, Technical Director
FROM: Dermot Winters, WIPP Cognizant Engineer
SUBJECT: Waste Isolation Pilot Plant Activity Report for January 2016

DNFSB Staff Activity: R. Quirk was onsite performing site-representative-like duties during January 11-15 and 25-29. D. Winters observed a WIPP DSA, Revision 5 SER workshop in Carlsbad during January 19-21. The increased level of oversight during January was in response to an accelerated pace of restart preparation activity. Oversight has averaged 1.8 man-weeks of Board's staff oversight per month during FY 2016.

Ventilation System Changes. Ductwork installation work to tie the new Interim Ventilation System (IVS) into the exhaust air ventilation circuit continued in January. On January 7, 2016 DOE announced that EM-1 had approved Critical Decision-1 for the WIPP permanent ventilation system.

Documented Safety Analysis (DSA). The staff confirmed concerns raised last month ([WIPP Activity Report, December 2015](#)) were being addressed during observation of the WIPP DSA Revision 5 Safety Evaluation Report workshop in Carlsbad, NM. These and significant issues with DSA Revision 5 identified by others, are among at least 16 major issues being tracked in addition to numerous lesser issues by the Carlsbad Field Office's (CBFO's) Safety Basis Review Team. Resolution of these issues led to the decision to install a new safety significant alarm system and the need for safety class controls for the waste hoist. A third identified that, although the electrical surface plant fire water pump meets new DSA requirements, the diesel pump does not. Timelines for resolution of all open issues have resulted in a delay in approval of the DSA until mid-February or later.

Oversight Observations. The accelerating pace of restart preparation activities included a number of developments being tracked by the staff.

- The consolidated Evaluation of the Safety of the Situation, Revision 1 was approved by CBFO; but an Implementation Validation Review (IVR) by NWP identified nearly 2 dozen issues to be resolved before implementation.
- Fire protection system exemption and equivalencies are being developed for the underground which require approval from DOE. These documents will formally spell out how fire suppression system requirements that are inconsistent between DOE and Mine Safety and Health Administration regulations will be handled.
- Installation and testing of an underground communications system to improve notification to underground personnel in an emergency is underway.
- The design and procurement process to obtain permanent underground Continuous Air Monitors to provide improved worker safety is underway. Once operational, underground workers will have rapid notification in the event of a radiological release event in the underground.