

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 2, 2017

TO: Steven Stokes, Technical Director
FROM: Leigh Lin, WIPP Cognizant Engineer
SUBJECT: Waste Isolation Pilot Plant (WIPP) Report for May 2017

DNFSB Staff Activity: A. Martin and D. Winters were on site May 16-18 for a walkdown of the Supplemental Ventilation System (SVS) circuit and to complete training. R. Quirk was on site May 15-19 conducting routine oversight. Staff oversight during FY-2017 has averaged 3.6 person-weeks/month.

Inadvertent Fan Shutdown. During testing of the controls for the non-safety SVS fan, a safety significant Interim Ventilation System (IVS) fan shut down in lieu of the SVS fan. The contractor's preliminary identification of the issue determined that there was inadequate configuration control of the software on the Central Monitoring System (CMS). They initially corrected this on their off-line development computer but did not upload it to the operable CMS software. This resulted in an IVS fan again shutting down in lieu of the SVS fan again when they resumed testing. The contractor has updated the operable CMS software to correct the issue.

Facility Maintenance. There are operational restrictions on the salt shaft due to gradual salt convergence at the bottom of the shaft, resulting in deformation of the structural supports. The contractor approved not performing weekly preventive maintenance inspections and tests below the elevation for salt loading onto the conveyance temporarily, and is developing an evaluation and justification for not performing these inspections until repairs are complete, which may take several months.

Waste Shipments and Emplacement: The site received shipments from Idaho National Laboratory, Savannah River Site, and Waste Control Specialists. The underground emplacement rate was approximately two pallets (four waste assemblies) per week. The Carlsbad Field Office (CBFO) line management evaluated operations during the commencement of waste emplacement and determined that the contractor has demonstrated adequate proficiency in waste handling and emplacement operations. CBFO has closed the startup oversight plan for waste emplacement.

Potential Inadequacy in the Safety Analysis Determination (PISAD) for Large Roof Fall Events. The PISAD for large rock fall events made in response to a DOE ORR finding was discussed with CBFO and Nuclear Waste Partnership (NWP) personnel via telecom on May 18. Staff members questioned whether such events should constitute an Unreviewed Safety Question.