

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 2, 2020

TO: Christopher J. Roscetti, Technical Director
FROM: Alexander Velazquez-Lozada, Cognizant Engineer
SUBJECT: Waste Isolation Pilot Plant (WIPP) Report for September 2020

DNFSB Staff Activity: There were no Board's staff visits to WIPP this month.

COVID-19 Response. WIPP continues operating in phase two of its recovery plan. Carlsbad Field Office (CBFO) continues with most of the staff teleworking, though with limited on-site oversight of operations and on-going projects. The rate of receipt of shipments increased slightly by the end of this reporting period. WIPP continues processing and downloading waste at approximately half of the rate before COVID-19.

Safety Basis. Nuclear Waste Partnership, LLC (NWP), completed a management self-assessment (MSA) that reviewed the preparation and maintenance of nuclear safety basis documentation, including concerns raised by Board. The MSA identified a lack of sufficient trained personnel to develop and maintain nuclear safety basis documentation; that personnel were unfamiliar with the process of maintaining the nuclear safety basis; and weaknesses in associated procedures. NWP identified a series of immediate corrective actions including: restricting diesel-powered equipment near the waste face if the equipment does not have an operable automatic fire suppression system; updating and correcting documents that support the safety basis; revising procedures to resolve identified issues; training personnel on performing unreviewed safety question determinations; and improving the configuration management of documents that support hazards analyses. NWP is pursuing other activities to improve the long-term viability of its nuclear safety organization and to evaluate overall program health.

Fire Protection System Upgrade. NWP continues to implement upgrades to the safety-significant fire suppression and detection systems for surface facilities. The project is divided into four phases: phase 1 includes a new pump house and two water storage tanks; phase 2 involves installing a new fire loop around the perimeter of the site; phase 3 focuses on tying the new loop to building sprinkler systems; and phase 4 includes replacing the fire detection and alarm system. NWP is implementing phases 1, 2, and 4; phase 3 will be implemented afterward.

Diesel Fire Pump Timely Order. As reported in the August 2020 monthly report, the safety-significant diesel powered fire pump is out of service. NWP continues operating under a limiting condition for operation action statement while relying on a single electric-powered fire pump.

Air Quality. DOE issued a consent order to NWP following an investigation of worker exposure to hazardous conditions. DOE's Office of Enforcement identified potential deficiencies in NWP's implementation of its industrial hygiene program, which included inadequate identification and assessment of hazardous chemicals and training for employees addressing such hazards, and a lack of timeliness in providing sample results to affected employees. NWP committed to implement a Hazard Abatement Plan, which incrementally reduces worker exposure permissible levels and ultimately meets required occupational exposure limits 180 days after completing the Safety Significant Confinement Ventilation System project.