

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 7, 2022

TO: Christopher J. Roscetti, Technical Director
FROM: Alexander Velazquez-Lozada, Cognizant Engineer
SUBJECT: Waste Isolation Pilot Plant (WIPP) Report for September 2022

DNFSB Staff Activity. The Board's staff participated in regular conference calls to maintain cognizance of site activities. During the week of September 12th, the Board's Vice Chairman, T.A. Summers, accompanied by staff members D.J. Brown, Z.T. Demeke, K.R. Herrera, A.M. Hutain, and A. Velazquez-Lozada visited the WIPP site, the facilities that support the National TRU [transuranic] Program (NTP) mission, and observed the WIPP annual emergency exercise.

Emergency Preparedness. On September 14th, WIPP conducted the annual emergency exercise. Nuclear Waste Partnership, LLC (NWP), Carlsbad Fire Department, Hobbs Fire Department, Eddy County Fire and Rescue, and the Carlsbad Medical Center participated in the annual exercise. The scenario involved an airplane crash outside the perimeter of the site adjacent to the Waste Handling Building (WHB), resulting in plane debris penetrating the wall of the Contact Handled Bay (CH-Bay) and impacting several waste containers. The staff team observed the exercise at the Central Monitoring Room, the Incident Command Post, and the Emergency Operations Center, as well as the associated venue hotwashes. The staff plans to review the after-action report when it becomes available.

Preventive Maintenance and Safety Basis for the Waste Hoist Brakes. As reported in the August 2022 Monthly Report, NWP management issued a Timely Order that suspended the use of the Waste Hoist for downloading waste until a required surveillance of the Waste Hoist brake pad could be performed. While the order was in effect, NWP further evaluated the nuclear safety basis and proposed changes to the Documented Safety Analysis (DSA) and Technical Safety Requirements (TSR). The proposed changes in the DSA clarify the required brake spring force; when the brake system is required to engage during loss of power or overspeed conditions; and add technical justifications for pressure ranges and caliper piston travel distances. The proposed changes in the TSR reflect manufacturer specifications for the operability requirements and add additional technical justifications for the surveillance requirements. Carlsbad Field Office (CBFO) approved the proposed changes to the nuclear safety basis and on September 12th, and NWP completed the Implementation Verification Review activities and lifted the Timely Order. NWP resumed downloading and emplacing waste in the evening of September 12th.

Waste Handling. As reported in the August 2022 Monthly Report, due to contamination in two shipping containers with compacted waste stream from Idaho National Laboratory (INL), INL management suspended shipments of the same waste stream pending completion of an evaluation of the situation. During this reporting period, the New Mexico Environment Department (NMED) instructed CBFO to suspend all waste shipments from INL pending more information about these two shipping containers and a third incident where drops of oil were found on a payload from INL. After further evaluation it was discovered that the oil came from a lifting fixture used to load the payload and that this third payload did not have integrity issues. By the end of this reporting period, CBFO and NMED were discussing resumption of waste shipments from INL.