

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 8, 2021

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

DNFSB Staff Activity. There were no Board's staff visits to WIPP this month. The staff participated in regular conference calls to maintain cognizance of site activities.

COVID-19 Response. WIPP continues to monitor staffing levels and meet the minimum requirements to continue operations with most of its staff teleworking. During the month of December, the rate of receipt of shipments remained at 2 shipments per week, with plans to increase to 5 shipments per week in January 2021.

Underground Ventilation System. The Board's staff attended a virtual Town Hall meeting hosted by the Carlsbad Field Office (CBFO) and Nuclear Waste Partnership, LLC (NWP), on December 10, 2020, during which details about the unfiltered 700C fan hot test were discussed. On December 31, 2020, NWP completed a Management Self-Assessment (MSA) and Implementation Verification Review of the Safety Basis Supplement (SBS) to support the initial four-hour hot test. The MSA and IVR teams reported findings and opportunities for improvement. The findings from the MSA team of most interest to the Board's staff involved the responses to adverse radiological indications, or anomalous sampling data during the hot test. Some of the opportunities for improvement include training documentation, updating fire protection inspection plans, ensuring all required subject matter experts are involved in document approval processes, and expanding Radiological Protection training offered to all shifts of workers. The SBS imposes interim controls and operational restrictions on the underground waste handling activities and on the configuration of waste disposal areas in the underground during the test. The findings from the IVR team are related to work control documents, training, and radiological sampling plans to be addressed before conducting the hot test. NWP is expecting to complete the IVR and MSA report, complete all corrective actions, and conduct the hot test in January 2021.

Safety Instrumented Alarm System (SIAS). CBFO completed an assessment addressing the Board's staff's observations related to a failure of the SIAS on December 9, 2018. Specifically, the failure involved the differential pressure indication at Bulkhead 308, which is required to verify the proper direction of underground air flow to avoid underground contamination spread and an unfiltered radiological release to the environment. As initially identified by the Board's staff, the CBFO assessment captured deficiencies requiring further corrective actions, including oversight weaknesses and program implementation concerns related to conduct of operations, training and qualification, configuration management, and the contractor assurance system. CBFO concurred with the Board's staff observations and identified additional issues during an extent of condition review, which included projects in various stages of development, such as the new safety significant confinement ventilation system (SSCVS) and new Underground Shaft project, where possible. The Board's staff is currently evaluating CBFO's assessment report.