

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 3, 2020

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

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

COVID-19 Response. WIPP entered phase two operations on June 15, 2020. WIPP continues to receive, process, and emplace TRU waste at a reduced rate. Carlsbad Field Office (CBFO) increased its on-site oversight.

Underground Ventilation Filtration System (UVFS)/Interim Ventilation System (IVS). As reported in the April 2020 monthly report, WIPP evaluated a potential inadequacy in the safety analysis related to the clogging of high efficiency particulate air (HEPA) filters in the safety significant UVFS/IVS. WIPP determined that the safety analysis was adequate. The Board's staff independently reviewed the technical basis for this determination and discussed some inconsistencies with WIPP. Nuclear Waste Partnership, LLC (NWP), re-evaluated the technical basis, determined that the safety analysis is incomplete, and is implementing corrective actions.

NWP reported several incidents involving a communication loss alarm from the IVS. This included losing the indication of IVS High Efficiency Particulate Air (HEPA) Filter Differential Pressure (DP). The IVS HEPA-DP instruments are safety significant. The IVS HEPA-DP indication provides assurance that the HEPA filter banks maintain the assumed pre-incident filtration capability and are not clogged. After troubleshooting, NWP determined that a communications network switch had failed. NWP procured a new network switch. Appropriate actions from the applicable limiting condition for operation condition remained in place until the replacement switch was installed and tested, and the remote indications of DP were restored.

Transuranic (TRU) Waste. As reported in the April 2019 monthly report, Los Alamos National Laboratory (LANL) Carlsbad Operations (CO) released two reports in January and April 2019 related to waste containing remediated nitrate salts or nitric acid mixtures with polysaccharides. On June 09, 2020, DOE's Office of Environmental Management (EM) released a memo indicating that these reports address a narrow subset of the TRU Waste and do not apply to other waste stored across the EM complex. The memo further indicates that any future use of these reports, as a basis/reference in safety basis documents, needs to be cleared with EM.

Conduct of Operation. NWP reported 3 incidents with roof bolting machines in the last 18 months in which personnel were injured. Roof bolting is part of the ground control program that mitigates the potential for unplanned rock falls. NWP stopped all roof bolting activities until corrective actions from previous incidents were evaluated and new actions to prevent recurrence were developed for the bolting machines involved.

CBFO Management. Deputy Manager K. Lachman left CBFO to become the Manager of the EM-Los Alamos Field Office. R. Knerr will become the permanent CBFO Manager after approximately 4 weeks of turnover with Acting CBFO Manager G. Sosson.