DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 1, 2019

TO: Christopher J. Roscetti, Technical Director
FROM: Alexander Velazquez-Lozada, Cognizant Engineer
SUBJECT: Waste Isolation Pilot Plant (WIPP) Report for February 2019

DNFSB Staff Activity: L. Schleicher and A. Velazquez-Lozada provided onsite oversight. Staff oversight during fiscal year 2019 averaged to 1.6 person-weeks/month.

Waste Management: Nuclear Waste Partnership, LLC (NWP), is planning readiness assessment activities to start receiving, downloading, and emplacing contact handled (CH) transuranic (TRU) waste stored in TRUPACT-III containers. Carlsbad Field Office (CBFO) will shadow the Contractor Readiness Assessment (CRA). This CRA will focused only on the process to receive and handle a CH TRUPAC-III at the surface. NWP indicates that the process used to download and emplace CH TRUPACT-III containers was reviewed by DOE Operational Readiness Reviews for programmatic CH TRU waste and does not warrant an additional CBFO readiness assessment.

Safety Significant Confinement Ventilation System (SSCVS): The Office of Environmental Management is performing a peer review of the WIPP SSCVS and Utility Shaft projects. The review team is assessing the approved baseline and progress toward Critical Decision (CD)-4, as well as the start-up of the SSCVS by November 2022. In addition, the review team is assessing the CD-2/3 documentation for the Utility Shaft project. Some of the areas the review team is assessing are: whether the project has been managed effectively and will complete construction as planned; whether previously identified issues with technology and nuclear safety have been addressed; whether the SSCVS project is adequately integrated with operations at WIPP; whether Technical/Environmental Safety, Health and Quality Assurance programs, controls, and processes have been properly implemented; and whether any unresolved issues associated with technology, design, nuclear safety, operability, and reliability could impact project schedule or achievement of Key Performance Parameters.

Waste Handling Building (WHB) Fire Protection: As reported in December 2018, CBFO required NWP to replace an administrative control with an engineered control (passive design feature) to prevent a fire-related structural failure in the Remote Handled Waste Bay of the WHB. This work was completed.

Out of Service (OOS) Equipment: As reported in September and October 2018, the Board's staff team identified problems with OOS equipment. The team reviewed documentation recently provided by CBFO that was intended to address observations that OOS tags were not properly tracked or maintained and that OOS program deficiencies were not properly documented. The team reviewed this new revision of procedure *Equipment Out of Service Process*. The team believes that if the procedure is properly implemented, the identified issues will be resolved.

Underground Ventilation System: Nitrogen dioxide (NO_2) in excess of established set points has been detected in the underground. WIPP continues to evaluate options to improve underground air quality and understand air flow patterns in the underground.