

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 5, 2019

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

DNFSB Staff Activity: R.G. Quirk provided onsite oversight during the week of June 3rd. Staff oversight during fiscal year 2019 has averaged 1.25 person-weeks/month.

Safety Bases. Carlsbad Field Office (CBFO) approved a safety bases change proposed by Nuclear Waste Partnership, LLC (NWP), to replace a Technical Safety Requirement (TSR) level control and implementation of a Specific Administrative Control (SAC) with a less rigorous administrative control. This change eliminates a credited safety function of a SAC that “provides for real time monitoring for elevated airborne radioactive material levels from exothermic chemical reactions of noncompliant containers by detecting and promptly alerting facility workers that may be in the proximity during this time.” NWP proposed two new key elements as part of the technical basis for the safety bases change. The first key element requires inspection and maintenance of isolation structures east of the air intake and air exhaust isolation barriers of Room 7, Panel 7. The second key element requires Central Monitoring Room (CMR) personnel to be notified when there is an alarm from a continuous air monitor in the Panel 7 exhaust drift when the panel, including the exhaust drift, is occupied. In addition, the change includes a new initial condition related to the exothermic chemical reaction of non-compliant containers in Panel 6 and/or Panel 7.

Conduct of Operation. NWP reported an incident in which investigative maintenance of the Central Monitoring System (CMS) tripped the Supplemental Ventilation System (SVS). Neither the CMS nor the SVS are classified as safety systems. The CMS is used for TSR compliance and the loss of the CMS requires TSR-mandated actions. NWP reported that the CMS was returned to the pre-maintenance configuration before any TSR Limiting Conditions for Operation (LCO) actions could be taken. The loss of SVS and CMS resulted in NWP temporarily suspending underground work. After NWP conducted a fact finding, they: began an evaluation of the work control process pertaining to CMS changes, initiated procedural changes to prohibit CMS evaluations/changes without an approved work control document, and began an evaluation to determine the cause of the SVS trip.

Corrective Actions. As reported in the December 2018 monthly report, the SVS was not shut down before performing preventive maintenance on the Bulkhead 308 alarm panel. Condition A of LCO 3.2.3 requires the SVS to be shut down when the alarm panel is not operable. NWP identified corrective actions related to this event, including evaluating conduct of operations practices, communication requirements, alarm sequences, and verification of LCO required actions.

Underground Ventilation. As reported in the May 2019 monthly report, CBFO is evaluating the potential startup of the 700 series fans to increase underground air flow. NWP is proposing a contractor readiness assessment (CRA) for the start-up of the 700C fan.