

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 1, 2025

TO: Technical Director
FROM: Hanford Site Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending August 1, 2025

Low-Activity Waste (LAW) Facility: The LAW Facility was evacuated when a smoke alarm actuated in the room that houses the uninterruptible safety power supply for one of the off-gas exhausters. Hanford Fire Department (HFD) responded, and access to the facility was restored after the HFD firefighting team determined conditions were safe. A subsequent investigation determined that the smoke alarm was caused by an arc flash event that occurred while workers were deconstructing a scaffold in the room. A metal plank, which workers were removing from the scaffold, bumped an electrical cable in an exposed cable tray while the plank was being handed from one individual to another. The impact caused a breach in the cable insulation, resulting in the arc flash. This was a near miss for the two individuals handling the plank. Plant management paused operations to address the safety concerns with all plant personnel and have placed temporary controls on the erection and deconstruction of scaffolding while they review procedures and practices related to this activity. Plant engineering is evaluating the damage to determine the effect on plant operations.

HFO approved BNI's evaluation of the safety of the situation related to the discovery of higher-than-expected nitrogen oxides after melter cold cap burn-off (see 07/18/2025 report). The approval indicates that HFO agrees that the LAW Facility safety basis remains bounding for accelerated carbon media fires and permits the removal of the operational restriction precluding melter operation with nitrated feed that WTCC management put in place when they identified the original potential inadequacy in the safety analysis.

High-Level Waste (HLW) Facility: DOE approved Revision 2 of the Safety Design Strategy (SDS) for the Waste Treatment Project. This revision updates the SDS to clearly show those systems and facilities that are part of the HLW Facility and those that are support systems or facilities. Additionally, the SDS now documents a rework risk resulting from the resolution of questions related to the use of ARCON96 to define dispersion parameters for the HLW safety design. These modifications address the two remaining conditions of approval from when DOE approved revision 1 of the strategy. Other significant changes include: (1) a commitment to perform the major modification to the Laboratory Facility, which will be required to support the receipt of high-level waste, in accordance with DOE Standard 1189-2016, *Integration of Safety into the Design Process*; (2) clarification of the project scope to show that the waste transfer vault, which will provide feed to the HLW Facility, is out of scope for this SDS; and (3) a section that states that the project is at Critical Decision 3 and notes that Direct Feed HLW is the decided path forward for the project.

Tank Farms: H2C management has lifted the safety stand-down to resume normal operations. Each area team has issued a resumption plan to improve and monitor the performance of their workforce, such as through Management Observation Program oversight (see 7/25/2025 report).