DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 12, 2021

TO: Christopher J. Roscetti, Technical Director

FROM: B. Caleca, P. Fox, and P. Meyer, Hanford Resident Inspectors **SUBJECT:** Hanford Activity Report for the Week Ending November 12, 2021

Hanford Site: DOE Hanford issued DOE-HRD-SH-51858, Direction for Nuclear Safety Implementation. Per the accompanying direction, the document is immediately applicable to safety basis work performed by the central plateau cleanup contractor. The document supersedes previous nuclear safety direction and guidance given to former contractors of the Richland Operations Office. It provides direction for developing documented safety analyses and technical safety requirements in accordance with the safe harbors identified in 10 CFR 830, Subpart B, Safety Basis Requirements. The direction does not preclude alternative compliance strategies for safety basis submittals if they are adequately justified and demonstrate compliance with applicable requirements. Significant changes implemented by the document include a requirement to prepare new safety basis documents in accordance with current versions vice previous versions of applicable safe harbors and consensus standards. Additionally, the document precludes the use of recovery plans in technical safety requirements. Existing recovery plans are to be removed from safety bases of existing facilities during their respective annual update. The document also provides direction for the use of RADIDOSE modeling and specifically directs the use of DOE STD 1027-2018, Hazard Categorization of DOE Nuclear Facilities, for new facility hazard categorizations and DOE STD 5506-2007, Preparation of Safety Basis Documents for Transuranic (TRU) Waste Facilities, or successor documents, to address transuranic waste hazards unless exceptions to the standard are explicitly justified.

Building 324: The resident inspectors observed a Hazard Review Board (HRB) meeting that was held to review two new work instructions that workers will use for opening the facility's hot cell airlock door and installing the rails used to move waste boxes in and out of the airlock. This is the first HRB held by the project team to review airlock activities since the 2019 pause in high hazard radiological work (see 11/22/2019 report). The discussion focused on the applicability and scope of these procedures given that airlock entries are not yet authorized for the project, though the project is training workers to be eligible for airlock work. HRB members provided minor comments and the board recommended approval of the work package. The resident inspectors noted that the participants were well prepared.

West Area Remediation Project: A truck that workers were using to move soil into a radiological buffer area (RBA) caught fire and was quickly extinguished by the Hanford Fire Department. During a critique held by contractor personnel to discuss the details of the event, the driver of the vehicle noted that he had made three trips that day prior to the fire and had performed his normal Department of Transportation (DOT) required inspection prior to using the truck. Attendees noted that the truck's wiring or battery was the source of the fire. The battery had been recently replaced, though no issues with the new battery had been identified prior to the fire. They also noted that the vehicle had been staged for use for approximately a year prior to being used. In conversations with contractor personnel after the critique, the resident inspectors determined that the contractor does not have special provisions for long-term storage of vehicles. Rather, pre-use DOT inspections are relied upon to identify issues. The contractor has paused use of these trucks until they complete their investigation.