

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 12, 2021

TO: Christopher J. Roscetti, Technical Director
FROM: B. Caleca and P. Fox, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending March 12, 2021

DNFSB Staff Activity: Members of the technical staff met with tank farm contractor subject matter experts to discuss the fire model that the contractor is using to support the development of a revised hazard control strategy for the 242-A evaporator. They are using the model to show that safety significant components will remain operable during a facility fire.

Waste Encapsulation and Storage Facility. Radiological control technicians found contamination in the hot manipulator shop during pre-job surveys that exceeded the levels allowed by the radiological work permit. Contractor management held a review meeting to discuss actions necessary to identify and eliminate the radioactive contamination source. Additionally, based on the discussion, management currently intends to modify their plans to use the shop for storage and staging of equipment during the upcoming facility modification work.

105-KW Basin: The contractor declared readiness to start retrieval of garnet filter media from the basin's three garnet filters and a contractor team will perform a readiness assessment. Retrieval of the filter media is the next step in preparing the basin for demolition.

Reduction Oxidation Facility: Contractor management held a critique to identify the events and decisions that led to the fabrication, installation, and partial energization of a power supply that did not match the configuration shown in the design drawings. The design drawings were developed by the contractor, the system was fabricated and installed by a subcontractor, and site service contractor utility personnel made the connection to the site power system. Although the discrepancy was discovered prior to energizing the system, power was applied without performing an engineering evaluation because personnel supporting the final connection determined, based on inspection, that the system was compliant with the electrical code and safe to operate. The critique discussion revealed potential problems with design media development, procedural compliance, the management of change during fabrication and installation of equipment, control of work in the field, and the abnormal event notification process. The contractor will perform an apparent cause evaluation to identify appropriate corrective actions.

Central Plateau Risk Management (CPRM): The contractor held its first meeting for the apparent cause evaluation (ACE) that they are conducting in response to the procedural non-compliances at the 203A facility (see 2/26/2021 report). The meeting focused on required tasks for ACE participants, including documents to review, and ACE goals. Participants noted that some of the personnel the team intends to interview will soon leave CPRM and should be prioritized. The ACE is scheduled to be completed in early April.

Building 324: A resident inspector observed the contractor's required training for performing work in Room 18 where a number of radiological contamination events occurred. The supplemental training was developed as part of the facility's Corrective Action Plan for those events (see 3/6/2020 report). The training primarily focuses on the donning and doffing of Room 18 specific personal protective equipment (PPE). The process includes multiple stations and intermediate decontamination of outer PPE. Room 18 work is expected to resume next week.