

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 24, 2017

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending November 24, 2017

Transuranic Waste Facility (TWF)–Safety Basis: Last Tuesday, TWF safety basis personnel entered the New Information process regarding an apparent inconsistency between language in the safety basis and an element of a safety management program associated with the waste acceptance criteria. Waste receipts remain on hold after TWF management paused work when NNSA Field Office personnel raised this question last month (see 10/27/2017 weekly).

Confinement Vessel Disposition (CVD) Project: On Monday, CVD personnel received the seventh vessel for processing at the Chemistry and Metallurgy Research building, following a recent series of waste container transfers to the Plutonium Facility to lower material-at-risk. The sixth vessel was completed in mid-September and had resulted in the creation of 69 transuranic waste drums. CVD personnel anticipate completion of the seventh vessel in June 2018 with the generation of an estimated 80 transuranic waste drums. Overall project completion, including an added tenth sphere with minimal material-at-risk, remains on track for December 2019.

Unremediated Nitrate Salt (UNS) Waste Treatment: On Tuesday, the Associate Director for Nuclear and High Hazard Operations, as startup authorization authority, approved commencement of UNS liner pull activities at Area G. Area G personnel expect to begin next week, pending DOE-EM Headquarters approval of the UNS treatment procedure, as required by the corrective action plan for the radiological release event at the Waste Isolation Pilot Plant.

Plutonium Facility–Radiation Protection: Last week, radiological control technicians (RCT) reported several contamination events in the facility. In all cases, either workers detected the contamination as part of routine monitoring or continuous air monitors (CAM) alarmed as designed. Additionally, there are no indications of radiological uptakes by the involved workers. The events included: (1) three closures of the north corridor resulting from a CAM alarm and RCT surveys indicating contamination of up to 4500 dpm. RCT management believes this contamination may have migrated from the room undergoing decontamination discussed below and have strengthened confinement practices; (2) a glovebox glove breach during repackaging activities of legacy nuclear materials, which was identified by the worker during self-monitoring. Glovebox safety personnel will review the location for latent sharps and recommended glove change periodicity; (3) a worker handling previously surveyed items, proactively self-monitored and discovered contamination on his glove. RCTs determined the contamination was from a particle, but were unable to otherwise find a source in the area; and (4) a worker detected skin contamination on their hand during self-monitoring, which RCTs successfully decontaminated and determined to be a particle.

Decontamination activities continue in the room affected by the errantly breached glovebox. Since management briefed the NNSA Field Office on progress (see 10/3/2017 weekly), six CAM alarms have been reported while the room was restricted. In the coming weeks, RCT management expects to release this room and its neighbor as contamination areas. As such, workers will be required to wear additional protective clothing and receive more extensive radiological exit surveys than is typical in the facility. RCT management proactively instituted this practice in a nearby room used for Pu-238 processing after a number of contamination events occurred during the last two months.