

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 27, 2013

TO: S. A. Stokes, Technical Director
FROM: D. Gutowski and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending December 27, 2013

D. Gutowski was off-site.

Tank Farms. The contractor determined they had not measured the flammable gas levels in three single-shell tank farms within the required time frame and therefore were not in compliance with the Technical Safety Requirements (TSR). The contractor then measured the flammable gas levels in the 35 affected tanks and concluded they had no or close to no measurable quantities of flammable gas. The apparent cause was an error in the shift manager turnover checklist in February but it was not noted until last weekend when a shift manager questioned why five different tank farms had the same due date for the annual surveillance requirement. An Office of River Protection (ORP) manager noted there have been several other errors in the management of technical information during the last six months that had similarities to this event. These include two other TSR violations: the premature removal of administrative locks on waste transfer pumps and the late calibration of a double-shell tank annulus level detector (see Activity Report 10/4/2013 and 9/6/2013). The manager cited other problems such as the failure to take prompt action when questions were raised with the quality of fasteners for safety-significant transfer lines (see Activity Report 11/8/2013) and the incorrect calibration frequency of two waste tank level instruments. Based on these events, ORP is developing a plan to assess TSR surveillance requirements, administrative controls, and design features with a focus on the technical rigor of data management. ORP will also perform a self-assessment of the oversight processes to ensure proper mechanisms and integration exist to ensure their oversight is adequate.

Prior to the contractor noting the TSR non-compliance above, ORP had sent a letter to the contractor which provided feedback on the contractor's performance addressing quality concerns with fasteners used in safety-significant transfer lines (see Activity Report 11/8/2013). In the letter, ORP noted a need for improved contractor communications with ORP when issues emerge. They also noted a need for improved coordination between the contractor operations, engineering, nuclear safety, and quality assurance organizations.

Waste Treatment Plant. The Safety Design Integration Team (SDIT) for the HLW facility completed its review of the design basis accident travelers supporting Safety Design Strategy development and provided feedback to the working team who developed the travelers (see Activity Report 12/6/2013). The Senior Management SDIT started their review cycle.

100K Area. The contractor implemented the downgrade of the K East Reactor Building to a less than hazard category 3 facility (see Activity Report 10/11/2013).