

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 10, 2014

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.K. Verhaagen and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending October 10, 2014

DNFSB Staff Activity: D.J. Campbell and R.C. Eul reviewed work planning and control.

Management: On Monday, the TA-55 Facility Operations Director (FOD) assumed control of the Chemistry and Metallurgy Research (CMR) building. The move is intended to facilitate the transition of CMR operations to the Radiological Laboratory Utilities Office Building, which is also under the control of the TA-55 FOD. The Science and Technology Operations FOD absorbed the remainder of the facilities under the former Radiological Chemistry Operations FOD.

Emergency Management: Last month, division personnel completed a six-sigma improvement initiative regarding emergency response with a particular focus on incident command and control. The initiative revealed the following key barriers to achieving success: (1) the process is inconsistent, often informal, disjointed, leading to added complexity, (2) lack of credibility and cooperation, (3) lack of formality of operations, (4) unclear roles and responsibilities, (5) poor integration between responders, and (6) emergencies are not reported or are not reported in a timely manner. Improvement actions include the development and training to standardized response processes and building emergency plans, as well as development of a standard line of inquiry for notification of emergencies with associated metrics. The schedule to implement these and other corrective actions runs through early 2015.

Plutonium Facility–Worker Safety: Recently, the programmatic operations group leader for actinide processing began developing improvement actions for two cases in one of the aqueous processing laboratories of gloveboxes with degraded material conditions. In one case, the group believes there is a breached gasket or similar failure on a spool piece associated with a glovebox line to be used for americium-241 production. The group has been troubleshooting spurious contamination events near this spool piece since a worker received an uptake in March 2013. The spool piece is currently draped with taped plastic sheeting and a radiological work permit is required for work in the associated glovebox; however, this glovebox remains operable per the safety basis (see 10/3/2014 weekly). In the other case, an entire wall of legacy gloveboxes, including some that housed a former incineration process for plutonium-238 contaminated rags, contains degraded conditions that workers suspect has contributed to multiple contamination events during the past few years. LANL management does not currently have a plan to remove these gloveboxes in order to both eliminate the hazard and free up the considerable space for new programmatic work.

Plutonium Facility–Criticality Safety: Operators recently initiated efforts to repackage plutonium metal turnings into water resistant containers to achieve compliance with the approved criticality safety limit under the Justification for Continued Operations (see 7/4/2014 weekly). The repackaging delays resulted from three criticality safety infractions in one of the two locations that contain more than 500 g of turnings and competition for the operators' time, since the operators are essential to the ongoing effort to resume the T-Base 2 machining activity.