

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 5, 2016

TO: Steven A. Stokes, Technical Director
FROM: Austin R. Powers, Cognizant Engineer
SUBJECT: Nevada National Security Site (NNSS) Report for January 2016

DNFSB Staff Activity: A. Powers and J. Deplitch were on site January 11th – 14th to observe the Coring Project Federal Readiness Assessment (FRA).

A. Powers, J. Deplitch, and Board members D. Santos and S. Sullivan were on site January 20th for Mr. Santos' orientation visit.

Device Assembly Facility (DAF) Coring Project: During the month of January, the National Nuclear Security Administration (NNSA) completed the Coring Project FRA. The FRA team consisted of federal employees from the Department of Energy's Office of Nuclear Energy, NNSA's Headquarters, the Sandia Field Office, and the Idaho Operations Office. In the final report, the FRA team identified eight findings (six were pre-starts and two were post-starts) in the following areas: nuclear criticality safety, federal oversight, fire protection, contractor management, maintenance, and conduct of operations. The staff found the FRA team to be competent and that the FRA team findings were consistent with the staff's observations. The staff plans to follow up with the Nevada Field Office (NFO) on the completion of the corrective actions prior to start-up. NFO has scheduled Coring operations to begin on March 3, 2016.

DAF Fire Suppression System (FSS) Improvement Project: During the month of January, the FSS improvement project began to excavate three significantly corroded lead-in lines into the south-side of DAF. After the pipes were excavated, it was observed that the pipes were corroding heavily from the outside, in addition to the known interior corrosion. The staff plans to follow up with NFO to see if there are any plans to include cathodic protection for the new lead-in lines. While the lead-in lines are being excavated, National Security Technologies, LLC (NSTec), has also begun to fix deficiencies in the sprinkler system in each of the buildings that make up DAF.

National Criticality Experiments Research Center (NCERC): During the past few months, NCERC personnel have been executing the Godiva Start-Up Plan to evaluate the effectiveness of new contamination controls, specifically Top Hat and the Air Filtration System (AFS). The NCERC team has conducted burst experiments at various outputs and measured the contamination throughout the Godiva Building. The team performed the experiments with neither of the new contamination controls, both controls, and each control individually. The data indicate that the Top Hat and AFS together reduce the contamination more effectively than either control acting alone. The NCERC team has decided that both the Top Hat and AFS will now be used for Godiva experiments. NFO has approved unrestricted operations on January 5, 2016.

U1a Complex Extension Project: During the month of January, the U1a complex continued its U1a.05 drift extension project. Current operations consist of mining into the Zero Room to add a second egress route for workers and to make it more accessible for the planned placement of new equipment into the room, particularly larger experiment containment vessels.