

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 3, 2016

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

DNFSB Staff Activity: A. Powers, J. Deplitch, and Board members J. Connery and B. Hamilton were on site May 3rd-5th for the Board members' orientation visit to NNSS.

DAF Fire Suppression System (FSS) Improvement Project: During the month of May, the controlled low-strength material (CLSM) concrete has properly cured and met specifications for the remaining two buildings with newly replaced lead-in lines. The National Security Technologies, LLC (NSTec), construction group working the FSS Lead-in Line Replacement Project has successfully returned two of the three buildings back to service. NSTec facility personnel experienced no issues when flushing the system and performing a surveillance of the system. The third and last building with newly replaced lead-in lines is expected to return to service during the month of June 2016.

Also during the month of May, NSTec developed the work packages to address the FSS for the four buildings that were added to the scope of the project for this fiscal year. As stated in the previous monthly report, the lead-in lines for these four buildings will be abandoned and they will instead be tied into the fire loop inside the DAF. NSTec has evaluated this design per the Unreviewed Safety Question process and identified no new issues or safety concerns. NSTec plans to begin this work during the month of June 2016. The four buildings are expected to be returned to service by the end of the fiscal year. The Board's staff is still waiting to receive the new hydraulic calculation that was performed to account for the new lines being introduced to the fire loop and verify that the FSS will still provide adequate coverage in all areas. The staff will review this calculation when available.

DAF Coring Project: During the month of May, NSTec completed the high efficiency particulate air (HEPA) filter testing for the secondary and tertiary ventilation systems for the building. The HEPA filter tests were successful and the tests results were approved by the Nevada Field Office (NFO). The secondary and tertiary ventilation systems for the Coring Project building are now fully operable. Correcting the HEPA filter system deficiencies closes the last pre-start finding from the Coring Project Federal Readiness Assessment (FRA) that remained to be addressed. NSTec has now closed all of the corrective action plans for the pre-start findings from the FRA. NFO is reviewing and validating the closure of the corrective action plans to ensure that all of the pre-start findings were adequately addressed. NSTec will startup coring operations once NFO approves the closure of the corrective actions plans—tentatively projected for mid-June 2016.

U1a Complex Life Safety and Fire Protection Improvements: During the month of May, NSTec completed the pressure testing of the newly installed zero room barrier in the U1a Complex. For this test, NSTec sealed the zero room shut and pressurized it with air. NSTec conducted the test to validate the confinement capabilities of the room per the requirements in the Documented Safety Analysis. The pressure test for the zero room was a success and resulted in no issues or safety concerns.