

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 7, 2016

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

DNFSB Staff Activity: The Board's staff did not conduct any on-site activities at NNSS for the month of September.

Device Assembly Facility (DAF) Fire Suppression System (FSS) Improvement Project:

During the months of August and September, National Security Technologies, LLC (NSTec), continued to make improvements to the FSS in DAF. NSTec declared one building operable in August and three buildings operable in September. NSTec construction has also completed tying the FSS into the inside fire loop for an additional three buildings and turned these three buildings over to facility control. NSTec facility personnel have accepted the work packages for the three buildings and are planning to declare the buildings operable in late October after performing the surveillance testing of the FSS. NSTec construction is also currently addressing a lead-in line (by abandoning the lead-in line and tying the FSS into the inside fire loop) for another building separate from the seven buildings discussed above. NSTec construction is near completion with their work and plans to turn the building over to the facility group in early October, with plans to return the building to operable status by the end of October. Lastly, NSTec construction has also been addressing the FSS sprinkler deficiencies in DAF. NSTec construction has addressed the deficiencies for two buildings and is currently working on five other buildings. To summarize the work that was completed during fiscal year 2016: NSTec addressed the corroded lead-in lines (either by replacing the lead-in lines outside DAF or by tying the FSS into the inside fire loop) for eight buildings in DAF, with five so far returned to operable status. Construction has begun for a ninth building and will be complete in fiscal year 2017. FSS sprinkler deficiencies have been addressed for two buildings in DAF. The NNSS cognizant engineer will continue to follow the progress of the improvements made to the DAF FSS during fiscal year 2017.

DAF Glovebox: During the month of July, NSTec discovered two cracks in the window panes for one of the gloveboxes in DAF. Since then, NSTec has postponed all operations performed in that particular glovebox (i.e., coring operations and assembly of Joint Actinide Shock Physics Experiment Research (JASPER) targets). In order to address the issue, NSTec has conducted an investigation to determine the root cause of the cracks. The investigation is still ongoing, but NSTec plans to use the results of the investigation to identify and correct any new potential deficiencies that could result in this occurring again. While the investigation is ongoing, NSTec has ordered a replacement window, which is made of a different material when compared to the previous window. NSTec has executed the Unreviewed Safety Question process because of this and determined that it remains within the DAF safety basis. During the month of October, NSTec will be working to complete the investigation and correct any identified deficiencies in the glovebox prior to restart. NSTec plans to return the glovebox to operation again by the end of October. The NNSS cognizant engineer will continue to follow the status of the glovebox.

JASPER Facility: During the month of September, the JASPER facility was unable to conduct a shot due to the DAF glovebox window issue. The next shot is scheduled for October, but this date is subject to change pending completion of the repairs for the DAF glovebox.