

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 5, 2016

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

**DNFSB Staff Activity:** D. Burnfield, J. Deplitch, K. Deutsch, and A. Powers were on site July 11<sup>th</sup>-15<sup>th</sup> to conduct the National Criticality Experiments Research Center instrumentation and controls review and perform routine oversight.

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

During the month of July, National Security Technologies, LLC (NSTec), continued making improvements to the FSS in DAF. As stated in the May monthly report, NSTec was developing work packages to address the FSS lead-in lines for four buildings inside DAF. NSTec construction has completed the work for these four buildings. The lead-in lines were abandoned and the FSS for each building is now tied into the fire loop inside the DAF. NSTec construction experienced no issues when performing this work. NSTec construction has turned three of the four buildings back over to facility control. For the last remaining building, NSTec construction needs to revise the as-built drawings and complete appropriate paperwork before turning it back over to facility control. Facility personnel still need to schedule surveillance activities, including the flushing of the system, to ensure the FSS is truly operable in accordance with design specifications. The Board's staff has received the new hydraulic calculations performed by NSTec to account for the new lines being introduced to the fire loop. The staff plans to review these calculations to ensure that the FSS will still provide adequate coverage for these buildings.

During the month of August, NSTec plans to address the lead-in line for an additional building inside DAF. For this building, NSTec construction will abandon the lead-in for this building and tie the FSS into the fire loop inside DAF, using a design similar to the work just performed. NSTec is also planning to address the internal FSS deficiencies for four buildings (including three of the buildings mentioned above) inside DAF. NSTec construction plans to begin addressing the deficiencies in one of the four buildings during the month of August and has begun developing the work packages for the other three buildings. The NNSS cognizant engineer plans to continue to follow the progress of the improvements made to the DAF FSS.

**U1a Complex Documented Safety Analysis (DSA) Update:** The Nevada Field Office (NFO) is expecting NSTec to submit the 100 percent complete DSA revision for the U1a Complex during the month of August. NSTec initiated the DSA revision because the hazard categorization (HC) for the facility is being changed from HC-3 to HC-2. NSTec has scheduled a briefing with NFO to discuss the 100 percent complete DSA revision at the end of August. NFO has scheduled the Safety Basis Review Team to begin reviewing the DSA during the month of September. The NNSS cognizant engineer will maintain close contact with NFO and NSTec to maintain awareness of any changes made to the DSA as it is processed and approved.