

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 2, 2017

**TO:** Steven A. Stokes, Technical Director  
**FROM:** Austin R. Powers, Cognizant Engineer  
**SUBJECT:** Nevada National Security Site (NNSS) Report for May 2017

**DNFSB Staff Activity:** D. Burnfield, J. Deplitch, M. Helfrich, and A. Powers were on site May 8<sup>th</sup> to 11<sup>th</sup> to review the NNSS site-wide, full-participation emergency exercise. While on site for the exercise, two members of the staff were also able to observe the Full Scale Compatibility Testing (FSCT) project management readiness confirmation board (MRCB).

**NNSS Contractor Status:** During the month of May, the National Nuclear Security Administration (NNSA) announced that Mission Support and Test Services, LLC (MSTS), was awarded the management and operating contract for NNSS. MSTS is a limited liability company consisting of Honeywell International, Inc., Jacobs Engineering Group, Inc., and Stoller Newport News Nuclear, Inc. NNSA is anticipating (barring any setbacks) the transition phase to begin toward the end of June.

**Device Assembly Facility (DAF) Fire Suppression System (FSS) Improvement Project:** During the month of May, National Security Technologies, LLC (NSTec), continued to make improvements to the FSS in DAF. For buildings 17 and 18 out of 25, NSTec declared both buildings operable during the month of May. For these building, there was an overhead spacing equivalency for the sprinklers (therefore, there were no sprinkler deficiencies to correct). NSTec construction has also continued to address the lead-in for building 19 out of 25. NSTec construction has procured the new piping material for this building and will continue construction activity (i.e., penetrations to the building and tying the pipe into the inside fire water loop). NSTec hopes to have the lead-in and sprinkler deficiencies addressed for this building and have the building operable by July. During the month of May, NSTec also addressed the sprinkler deficiencies for one of the surveillance towers and returned the building to operable status. NSTec is currently on track to address the lead-in lines for all of the buildings planned for (and one additional building) in fiscal year 2017. The NNSS cognizant engineer will continue to follow the progress of the improvements made to the DAF FSS.

**FSCT Project:** The FSCT project is a Lawrence Livermore National Laboratory (LLNL) research and development project that will span multiple years within an assembly cell building at DAF. LLNL seeks to better understand the long-term effects of pressurized gas on nuclear materials staged within confinement vessels. During the month of May, the MRCB and the contractor readiness assessment (CRA) were conducted for the FSCT project. The MRCB team and CRA team consisted of personnel from both NSTec and LLNL. The MRCB team approved all of the prerequisites for the project and had no findings. The CRA team found all the core requirements to be met and had two pre-start findings. The first pre-start finding requires LLNL personnel to determine and document the criticality safety significance for two items: 1) the heat blanket that is wrapped around the confinement vessel to help maintain the temperature and 2) a cover that protects the instrumentation on top of the confinement vessel. The second pre-start finding requires LLNL personnel to correct the valve numbering nomenclature between the setup procedure and the pump-down backfill cart. The CRA team determined that the FSCT project can be safely and compliantly conducted once the findings have been resolved.