

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 6, 2015

TO: Steven A. Stokes, Technical Director
FROM: John E. Deplitch, Cognizant Engineer
Austin R. Powers
SUBJECT: Nevada National Security Site (NNSS) Report for October 2015

DNFSB Staff Activity: J. Deplitch visited NNSS on October 13 – 16 to discuss and observe the Device Assembly Facility (DAF) annual functional emergency exercise; Godiva startup; DAF Coring Project; improvements to the DAF fire suppression system; improvements in U1a Complex fire protection and life safety; DAF and U1a safety basis activities; and DAF and U1a ongoing operations.

Device Assembly Facility (DAF): National Security Technologies, LLC (NSTec) and Lawrence Livermore National Laboratory (LLNL) management conducted a Management Confirmation Review Board assessment to confirm the Coring Project was ready for the Contractor Readiness Assessment (CRA). NSTec and LLNL began the Coring Project CRA on October 26 and planned to complete the CRA on November 5.

NSTec conducted the DAF annual functional emergency exercise on October 14. The exercise included comprehensive participation of all facility personnel, site emergency response personnel, Air Force personnel, and the Nye County Sheriff's Department. NSTec could have counted the exercise as an annual site-wide emergency exercise. The exercise scenario included a simulated military remotely piloted aircraft crashing into a truck delivering a container of nuclear material in one of the shipping and receiving buildings. The simulated crash resulted in a fire, injuries, two fatalities, and potential radiological contamination. A DAF operations control person immediately announced protective actions throughout DAF and notified the site Operations Coordination Center. The DAF lead emergency director (LED) categorized and classified the event as a Site Area Emergency and made notifications within a few minutes. The DAF LED, protective force commander, and fire department commander established a unified command and communicated through an open bridge line. DAF radiological control personnel set up contamination control, monitored personnel and the container for contamination, and surveyed into the accident area. The site Emergency Operations Center (EOC) activated in about 30 minutes. The Board's staff will review the exercise after action report, when it is available in the next month, for any identified findings, opportunities for improvement, and corrective actions.

National Criticality Experiments Research Center (NCERC): On October 8, 2015, a fire alarm went off in the Godiva and Comet Building during a period of time when no personnel or activities were going on in the building. There was no indication of smoke or fire from the cameras. The DAF staff implemented its emergency response actions, declared a Site Area Emergency, initiated protective actions, and made notifications. The Fire Department responded and found no ongoing fire but a strong odor of smoke in the mechanical equipment/HVAC room (smoke had been evacuated through the ventilation system). The Emergency Director in the site EOC terminated the emergency about 4 hours later. Subsequently, an electrician determined that the cause of the event involved an air handler motor that shorted and seized, while the rotational momentum of the blades led to the drive belt burning up and melting.