

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** Austin R. Powers, Cognizant Engineer  
**SUBJECT:** Nevada National Security Site (NNSS) Report for November 2019

**Downdraft Table Restart Status:** As discussed in the NNSS Monthly Report for June 2019, Mission Support and Test Services, LLC (MSTS), has initiated an effort to restart downdraft table operations in the Device Assembly Facility. In November, MSTS submitted their plan of action for the contractor readiness assessment. Both MSTS and Lawrence Livermore National Laboratory (LLNL) will jointly conduct the readiness assessment. MSTS is responsible for ensuring the operational readiness of the infrastructure and controls associated with the downdraft table building. As part of the assessment, MSTS will evaluate the previously out of service controls (i.e., confinement system, secondary confinement system, and pre-action fire suppression system). MSTS has maintained the operability of the building structure and special door interlock system throughout the period of inactivity for downdraft table operations. Therefore, these controls are not included within the contractor readiness assessment scope. LLNL is responsible for downdraft table project operations and will demonstrate these activities during the assessment. Downdraft table operations include the activities that occur within the building and the movement of material into and out of the downdraft table building. In November, MSTS also conducted the implementation verification review for the controls listed in the technical safety requirements document and declared the controls effective.

**U1a Complex Contamination Event:** As discussed in the NNSS Monthly Report for April 2019, MSTS was looking at different corrective actions that will help the radiological control technicians better understand Zero Room conditions before re-entering after an experiment. In September, MSTS finalized a list of actions items to be addressed. The list was developed by personnel from MSTS, Los Alamos National Laboratory, and LLNL. Action items include revising procedures and checklists, performing evaluations that will limit the spread of contamination in or assist with decontaminating the Zero Room (such as covering equipment or having a hood with high efficiency particulate air filter near the vessel), and determining if additional monitoring systems (e.g., continuous air monitors and vessel pressure monitors) are needed. MSTS is also identifying appropriate subject matter experts for reentry and decontamination activities and developing pre-planned forensic procedures. MSTS expects all of the actions to be completed by December 2019. Lastly, LANL is still performing a causal analysis for the confinement vessel leakage. Depending on the results of the analysis, LANL will identify any lessons learned or improvements to be made to the confinement vessel.

**Conduct of Operations and Work Planning:** As discussed in the NNSS Monthly Report for September 2019, Nevada Field Office (NFO) management directed all of the safety and operations staff to conduct assessments of work planning in their respective functional areas including execution of work packages. Over the past two months, facility and safety system oversight representatives conducted numerous operational awareness activities on various work packages. Based on the awareness activities, NFO personnel identified several issues and weaknesses in the reviewed work packages. NFO management is evaluating the identified issues and weaknesses and determining the best path forward to communicate them to MSTS.