

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 2, 2015

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

DNFSB Staff Activity: J. Deplitch and B. Rosen participated in a conference call to discuss nuclear material packaging related to DOE Manual 441.1-1 on June 12.

Nevada Field Office (NFO) Realignment. On June 15, NFO implemented a realignment of office responsibilities and personnel. All oversight personnel from high hazard facilities are now assigned to the Office of the Assistant Manager for Safety and Security (AMSS). The nuclear safety team, safety system oversight personnel, and subject matter experts for fire protection, criticality safety, and health physics were already located in AMSS. Facility representatives and subject matter experts for maintenance, conduct of operations, readiness, quality assurance, high explosives, and emergency management moved to AMSS from the Office of the Assistant Manager for Operations.

National Criticality Experimental Research Center (NCERC) Federal Readiness Assessment:

The NFO readiness assessment team completed the federal readiness assessment (FRA) for the resumption of Godiva operations on June 11. The primary focus of the assessment was the implementation of the revised radiological control program for the Godiva fast burst reactor. The FRA team determined that two of twelve functional areas did not meet the objectives. The team identified five pre-start findings, three post-start findings, and eighteen observations. Pre-start findings included the following concerns:

1. The Godiva building HEPA-filtered ventilation system included unresolved vulnerabilities that may result in loss of confinement capability.
2. The Godiva operating procedures direct that the Radiation Area Monitoring System be placed in the alarm mode during Godiva operation, but did not account for the impact this mode has on associated ventilation systems.
3. A radiological work authorization had not been developed for the installation and removal of Top Hat from the high contamination area. Top Hat is a cylinder placed over the Godiva fissile material as a means to control the spread of contamination.
4. The Godiva building is treated as an airborne contamination area after a shot, but there was no instruction in the radiological work permit to collect or evaluate air sampling data prior to reducing the respiratory protection requirement after Godiva reentry.
5. The Godiva Start-Up Plan protocol to validate and verify radiological controls and air flow was lacking in specificity to provide for repeatable evaluations and needs further clarification before resumption of operations.