

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy J. Dwyer, Technical Director
FROM: Timothy Hunt and Rory Rauch, Pantex Site Representatives
DATE: 12 June 2009
SUBJECT: Pantex Plant Weekly Report

Nuclear Explosive Safety (NES) Master Studies: The final coordination copy of the report for the recent support activities NES master study was issued with identification of two post-start findings related to fire department emergency response equipment and procedures. There was also a minority opinion that identified the lack of a human factors subject matter expert within the B&W Pantex organization and that human factors considerations are not a formal element of the tooling and procedure development processes. This was the last of five master studies performed over the past three years to evaluate gaps in the weapon-specific studies with facility- or generic activity-based reviews.

Emergency Lights (E-lights): For the second time in four weeks, the E-lights in an NE cell did not pass the annual surveillance requirement to provide 0.5 ft.-candles of illumination for 30 minutes on backup power. This particular model of seismically qualified E-lights is installed in six NE cells; two of the three that have undergone the annual surveillance test this year have not passed on the first attempt. System engineering is satisfied with the reliability of this model of E-lights at this time, but will gather additional data by adding a quarterly preventive maintenance activity that tests the function of the lights for 30 minutes.

Fire Protection Upgrades: The High Pressure Fire Loop (HPFL) upgrade project issued the Request for Proposals to 27 bidders in April. Five bids were received in May. Critical Decision-3 approval is expected in early July, pending approval of an outstanding baseline change proposal.

Upgrades to the lead-in piping from the HPFL to the facility will be accomplished as a General Plant Project. This will allow the site to fund the upgrades up to a maximum of \$10 million annually. NNSA headquarters is seeking funding for this project.

B53 Dismantlement: The B53 SS-21 project team is in the process of working through an emergent issue associated with electrostatic discharge (ESD) circuits requiring additional design agency analysis. The project team will determine whether the authorization date is impacted within the next month, but the first dismantlement remains scheduled for January 2010. Based on a preliminary manufacturing schedule, B&W Pantex is expected to dismantle about a third of the available units in FY10 with the remainder completed in FY11.

ESD Flooring: A total of 29 nuclear explosive facilities now have ESD floors applied. Based on the assumption that eventually all programmatic work will be done in an ESD environment, it is anticipated that an additional 16 bays, three cells, and six special purpose facilities will have floors installed in the coming years.