DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 6, 2018

TO: Steven A. Stokes, Technical Director
FROM: Bradford V. Sharpless, Cognizant Engineer
SUBJECT: Idaho National Laboratory (INL) Report for March 2018

DNFSB Staff Activity. Board's staff members did not conduct any on-site activities during March 2018. The Board's staff provided an average of 0.83 person-weeks per month of on-site oversight for the first six months of fiscal year 2018.

New Waste Calcining Facility (NWCF). On March 06, 2018, during uranium-233 waste repackaging activities in the Steam Spray Booth at Idaho Nuclear Technology and Engineering Center's NWCF (CPP-659), a Radiological Control Technician (RCT) was assisting two operators in securing new sleeving to a glovebox transfer port. The RCT heard a "pop" sound and noted that the sleeved waste from the previous bag-out operation was breached and waste had fallen out of the sleeve. The breach appeared to result from a separation at the tape seal area on the sleeve.

The RCT and the operators finished securing the new sleeving to the transfer port on the glovebox to put it in a safe configuration and exited the work area. They performed personal radiation contamination surveys for beta/gamma and alpha activity, which detected no contamination. Radiation Protection personnel then took mouth and nose swabs from all three individuals, again detecting no radioactive contamination.

Appropriate notifications were made to contractor and Department of Energy managers. Corrective actions included ensuring adequate sleeving was used for bag-outs, and ensuring proper J-sealing of the cut ends when sleeving out waste.

Advanced Mixed Waste Treatment Facility (AMWTF). On March 9, 2018, an operator at AMWTF was using a forklift to transport a waste box to a flatbed truck when the forklift inadvertently contacted another worker. The worker was moving a rope barrier for the forklift driver when the forklift's left rear tire grazed the worker's right foot. Upon being contacted by the forklift, the worker was knocked off-balance, stumbled away from the forklift (but did not fall), and called out to the forklift driver, who immediately stopped the forklift. Following the event, the worker was transported to the INL site medical facility, evaluated, and determined to be uninjured.

During the fact finding meeting following the event, it was revealed that the worker was replacing a rope barrier and was walking away from the forklift with the rope in hand. He mistakenly assumed he was out of the swing radius of the forklift. The forklift driver initially glanced at the worker moving away and also assumed he was out of the travel path.

Corrective actions included a briefing to all crews on the importance of situational awareness by both the forklift driver and the "ground" worker involved in this event. Additionally, management instituted a requirement that there be an assigned spotter for all waste movement work crews.