

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 2, 2015

MEMORANDUM FOR: Steven Stokes, Technical Director
FROM: Bradford Sharpless, Idaho Cleanup Project Cognizant Engineer
SUBJECT: Idaho National Laboratory (INL) Report for September 2015

DNFSB Staff Activity: Board's staff member R. Daniels was on site on during September 1–4, to observe the Department of Energy (DOE) Readiness Assessment (RA) at the Advanced Mixed Waste Treatment Project (AMWTP) for startup of High Fissile Gram Equivalent operations. Board's staff member J. Abrefah was on site during September 8–11, to observe a DOE Idaho Operations Office Safety Culture Self-Assessment. The Board's staff provided an average of 1.6 man-weeks of on-site oversight per month for the first 9 months of 2015.

INL Management Change: Dr. Mark Peters will assume the position of INL Director on October 1, following the retirement of the previous INL Director, John Grossenbacher.

Integrated Waste Treatment Unit: On September 15, while conducting non-radiological waste simulant operations at IWTU, operators noted a low differential pressure reading across the Process Gas Filter (PGF). Facility management elected to shut down and cool down IWTU's processing systems to support an inspection of the PGF. On September 22, after removing the head of the PGF vessel, workers removed a filter bundle from the PGF tube sheet and noted that some of the individual filter elements had failed. Thus far, 32 of the PGF's 342 filter elements have been identified as damaged, most having broken at the coupling weld where the upper and lower sections of each filter element are joined. IWTU remains in SHUTDOWN MODE as its engineers continue to investigate the extent and cause of the filter element failures.

Advanced Mixed Waste Treatment Project: A DOE RA team verified AMWTP's readiness to commence processing "High Fissile Gram Equivalent (FGE)" waste boxes. These boxes contain transuranic waste with fissile material quantities between 325 and 450 FGE of plutonium-239. AMWTP's previous Documented Safety Analysis-imposed limit for boxes that could be processed in the facility was 325 FGE.

The DOE RA team conducted its review during August 31–September 4. At the conclusion of the RA, the team assessed that AMWTP had met all sixteen evaluated core requirements. The team did not identify any pre- or post-start findings in its final report and recommended that the Startup Authorization Authority authorize the commencement of High FGE activities at AMWTP.

Contract Extensions: On September 30, DOE's Office of Environmental Management announced six-month extensions of two contracts at INL. The contracts, which were set to expire on September 30, will now run through March 31, 2016. CH2M-WG Idaho, LLC (CWI) secured a contract extension for the Idaho Cleanup Project. CWI's activities under the Idaho Cleanup Project include retrieval, disposal, and other remediation related to buried waste, environmental remediation, and sodium bearing waste processing. The other contract extension went to the Idaho Treatment Group for the operation of AMWTP.