

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 1, 2020

TO: Christopher J. Roscetti, Technical Director
FROM: Timothy L. Hunt, Cognizant Engineer
SUBJECT: Idaho National Laboratory (INL) Report for April 2020

DNFSB Staff Activity: No staff members were on site during April 2020.

COVID-19 Response Update. The state of Idaho's stay-at-home order expired April 30, 2020. In its place, the governor announced a plan that establishes four stages for reopening the state offices and businesses, including INL, and provides a framework consistent with White House guidelines. DOE's Office of Environmental Management (EM)-Idaho Cleanup Project is awaiting approval from EM headquarters to add additional activities and operations to those currently being conducted, consistent with the state's plan. If approved, these high priority, low-risk operations will start on May 4, where social distancing can be maintained, and be fully implemented by May 25. Additional limited activities may be approved where a combination of social distancing and other controls can be employed (cleaning, cloth masks, etc.), consistent with the first stage of the state framework. For the Integrated Waste Treatment Unit, this means some additional Outage J activities; at the Idaho Nuclear Technology and Engineering Center (INTEC), calcine mockup system testing will restart; and at various facilities, operation-required preventive and corrective maintenance will resume.

INTEC Crane Load Test. The fuel handling crane located in the fuel storage area of CPP-666 is an overhead bridge crane with a 130-ton main hoist capacity and an auxiliary hoist of 25-ton capacity. In November 2019, while using the main hoist, operators identified a burning smell coming from the area of the main hoist trolley brake. In early March 2020, maintenance personnel identified a self-adjusting plate that had not dropped all the way down on the hoist brake, causing the load-bearing shoe (pad) to heat up against the brake drum. The brake shoes were replaced and a load test initiated. The load test was to be between 100 percent and 125 percent of the 130-ton capacity. The total stack of weights added up to 144.5 tons, 111 percent of crane capacity. The load test was successful and the crane was placed back into service.

Fluor Idaho Radiological Protection (RP) Program. Following a recent investigation into a flagged optically stimulated luminescent (OSL) dose report, RP program personnel determined that the cause of a discrepancy between the electronic dosimeter and OSL results was the individual failing to sign on to the Sentinel electronic radiological work permit (RWP) system prior to beginning work in a radiological area. Two more Advanced Mixed Waste Treatment Project individuals were later found to have also entered into radiological areas without signing on to the appropriate RWP. The RP program developed sitewide tailgate training presented by RP management to address dosimetry and RWP compliance, initiated a management assessment to review the understanding and ability to conform to RWP requirements, and evaluated the extent of condition for radiological worker trained personnel. In addition, the program enhanced management workplace visits to cover dosimetry, RWP/Sentinel, and compliance with procedures and postings. The RP program also recently completed their triennial assessment of the area radiation monitoring and instrument calibration and maintenance functional elements. The assessment showed that these safety management program functional elements are effective.