DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 7, 2022

TO: Christopher J. Roscetti, Technical Director

FROM: Erin A. McCullough, Cognizant Engineer

SUBJECT: Idaho National Laboratory (INL) Report for September 2022

DNFSB Staff Activity. The Board's cognizant engineer visited the Advanced Mixed Waste Treatment Project (AMWTP) facilities to observe as operators decontaminated the TRUPACT-180 container. She also performed walkdowns throughout the AMWTP waste drum staging and real-time radiography facilities with Department of Energy (DOE) federal and contractor fire protection personnel. At the Integrated Waste Treatment Unit (IWTU), she reviewed outside operator logs, operator turn-over sheets, lock-out tag-out packages, signed pre-job briefs, and other operational worksheets. Further, a staff member with conduct of operations expertise visited INL facilities to work with DOE federal fire protection and quality assurance personnel.

COVID-19 Update. The Centers for Disease Control and Prevention COVID Data Tracker shows that all counties near INL facilities still have "Low" COVID-19 Community Levels.

IWTU Planned Outage Preceding Start-up. The IWTU is currently in planned Outage "L", during which operators will resolve pre-start findings following the DOE Readiness Assessment and perform additional maintenance prior to commencing radiological operations. For example, operators will reconfigure the treated water recirculation line and install the replacement coal conveyor chain by the end of Outage L. On-site storage and the installation of a new nitrogen gas generator will mitigate operational impacts due to potential disruptions with gas deliveries.

Executive Management Operational Directive: Implementation of Lockout/Tagout. On August 15, 2022, an executive management operational directive (EMD-60 Rev. 0) described a "continuous negative trend in hazardous energy control and lockout/tagout events across the Idaho Cleanup Project." It further stated that previous corrective actions did not result in long-term improvement. This directive created additional managerial requirements for the existing lockout/tagout program, such as documenting pre-job briefs for Level I and II lockout/tagouts and keeping the MCP-3651 lockout/tagout procedure available for review while installing lockout/tagout. The DOE Idaho Cleanup Project has two active lockout tagout assessments (Radioactive Waste Management Complex and Idaho Nuclear Technology and Engineering Center). A portion of each assessment will consider adherence to this directive. Shift supervisors were able to timely produce written and signed pre-job briefs for selected lockout/tagout packages for cognizant engineer review upon request.

Roll-up Door Failure at the Idaho Nuclear Technology and Engineering Center. On September 22, 2022, a roll-up door at the Boiler House unexpectedly stopped approximately three feet above the ground while being lowered, causing part of the drive mechanism from overhead to break-off and strike an operator's leg after first hitting the floor. The cause for this failure is currently unknown and all other roll-up doors will be subject to an extent of condition evaluation. From the federal DOE perspective, "the debris from the door drive mechanism could easily have caused a serious injury" and "there was no safety mechanism in place that could have prevented further injury." Accordingly, this reportable event has been categorized as a "near miss."