

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 3, 2021

TO: Christopher J. Roscetti, Technical Director
FROM: Erin A. McCullough, Cognizant Engineer
SUBJECT: Idaho National Laboratory (INL) Report for November 2021

DNFSB Staff Activity. The Board's INL cognizant engineer observed the Carlsbad Field Office Audit of Characterization and Certification Activities for Contact-Handled Waste at the Advanced Mixed Waste Treatment Project during the first week of November. She performed walkdowns at the Radioactive Waste Management Complex and the Integrated Waste Treatment Unit (IWTU) from November 8-10, 2021.

COVID-19 Update. For nearly two months, "Crisis Standards of Care" were in effect in Idaho. The Idaho Department of Health and Welfare has deactivated them in regions surrounding INL. While full vaccination rates for the State of Idaho hover at 41%, nearly 100% of the Department of Energy INL personnel are fully-vaccinated. Fluor Idaho, LLC (Fluor Idaho), continues its contract transition to the Idaho Environmental Coalition, LLC (IEC), which already presented a vaccination policy to Idaho Cleanup Project (ICP) personnel. Approximately 85% of ICP personnel are fully-vaccinated, not counting another 5%, who received their first dose. Strict enforcement of the Fluor Idaho or IEC workplace vaccination policies could affect over 170 unvaccinated employees.

Initial Notification Report – Work Conducted in a High Airborne Area without a Properly Functioning Powered Air Purifying Respirator (PAPR). On November 9, 2021, a mechanic removing his personal protective equipment after working in a hot cell within the Crane Maintenance Area of CPP-666 noticed that the blower motor for his PAPR had stopped. Radiological Control personnel collected nasal swabs and frisked his whole body at the time of the event and did not identify any contamination. Mask swabs also returned negative results for contamination. Without the motor, the PAPR still performed as a respirator with a protection factor of 50, which Radiological Control confirmed to be adequate based on airborne sampling survey results. The cause of the failure is unknown at this time. A Management Review of the event also revealed a need for more immediate notification to the Nuclear Facility Manager, who learned of the event the following day.

IWTU Granular Activated Carbon (GAC) Beds. During Outage J, the IWTU GAC beds were emptied and refilled with new GAC. This new GAC includes dust and carbon fines which become airborne and travel downstream through the off-gas system during system startup, interfering with the system's carbon monoxide monitors, and requiring frequent cleaning of the monitors. This additional work is prolonging the startup process but will continue until the dust and fines have been sufficiently reduced to allow normal steady-state operation. This ongoing issue has delayed the Contractor Readiness Assessment for IWTU radiological operations that was previously scheduled to begin November 30, 2021. The extent of the delay will become more clear once the IWTU completes the GAC bed conditioning. IWTU staff are evaluating methods to minimize the future impact to operations of starting GAC beds with new bed material.