

Interdepartmental Letter
Transition and Disposition Program

July 1, 2024

MEMORANDUM

To: (b) (6)
From: (b) (6)
Subject: B251 D&D Project Demolition Commencement

Since 2021, hazard mitigation efforts have been underway at the B251 facility to ready the structure for demolition. With the hazard mitigation efforts now complete, the Transition and Disposition Program and IPT, together with delegates from the B151 Complex and RHWM (known hereafter as the LLNS B251 SME's) have been performing demolition readiness walkdowns of the B251 facility.

During these facility walkdowns, the LLNS B251 SME's have been able to confirm that all relevant building hazards and related wastes have been removed from B251, with some exceptions. The exceptions include remaining ductwork and a shielding wall in R1165.

After discussions with DOE, it was determined that the remaining ductwork will stay within the facility during demolition, and the DOE EM Contractor, APTIM, has updated their Demolition Work Package to include a more prescriptive method of removal that minimizes potential errant dust from and potential damage to the remaining ducting, and include segregation of the ducting for waste disposition purposes. APTIM is updating their Demolition Work Package to address how the remaining shielding wall in R1165 will be further characterized post demolition, with hold/pause points as needed should higher activity be discovered.

All identified hazards and waste items, including the ducting and shielding wall, have an approved profile at the ultimate Treatment, Storage, and Disposal Facility (TSDF) of Energy Solutions in Clive, UT.

During demolition continuous air monitoring will take place at the project site, with filter media analyzed by the B151 Complex staff. A communication and work pause protocol has been developed jointly with B151 Complex Personnel and APTIM, and documented in the APTIM Demolition Work Package.

APTIM will collect air samples and provide them to the B151 Complex at the following frequencies:

1. Immediately prior to demolition start.
2. On the first day starting building demolition.
3. Weekly composite during each week of demolition.
4. Start of demolition in a new increment.
5. Demolition starts in rooms that were previously designated as CA or HCA, and Room 1150, which have a higher potential for contamination.

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6. The air samples will be collected by APTIM from the perimeter of the demolition site and will be made available to LLNS by 3pm of the first day of sampling to run overnight. LLNS will provide results no later than 9am of the following day.
7. APTIM will institute hold points while obtaining results from LLNS prior to starting work in the morning.
8. Should elevated levels from nuclides of concern be found in the analysis, a work pause will be initiated through the B151 Complex leadership and communicated directly to both the DOE EM Federal Project Director and APTIM project management.
9. Work pause restart criteria will be jointly identified by the B151 Complex Leadership and APTIM
10. The work pause may be lifted once the B151 Complex leadership and APTIM jointly concur that the appropriate mitigation measures have been implemented, with the B151 Complex Leadership communicating to the DOE EM Federal Project Director and APTIM project management that work may restart.
11. If no nuclides of concern are found, then demolition activities may continue after B151 notification e-mail to APTIM.

Mitigation measures at the B151 Complex have been installed, including tacky mats at exterior doorways, temporary air filters at the B155 intake, and a temporary barrier at the B151 Complex air intake.

The volume of waste that will be shipped offsite during the demolition of B251 will be far greater than is typical at LLNL. To accommodate this increase in volume, there will be a dedicated truck inspection lane for D&D trucks, the RHEM Shipping Office will have a dedicated team responsible for B251 waste paperwork reviews and DOT surveys, coordination with PMO Construction Managers to communicate increased truck traffic will take place, and a Newsline Article will be published communicating the increase in truck traffic to the broader LLNL audience.

To better understand waste disposition and shipping logistics, LLNS and APTIM have been holding demolition loading “dry runs” to practice the increased waste loading activities, and recurring waste throughput logistics working sessions with APTIM and LLNS will be taking place.

At this time, the LLNS B251 SME’s recommend that the LLNL Principal Deputy Director concur on the B251 Structure Demolition and notify DOE LFO and DOE EM of said concurrence.

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