300-296 Remote Excavation

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Agenda

- Current Activities
- Pilot Holes (drilling into soil near 300-296)
- Mockup Activities
- Groundwater Monitoring
- Cleanup Levels
General Status and Activities

- 324
  - Finishing the Structural Design
  - Performing structural modifications
  - Geoprobe removal
  - Cell sealing
  - B-cell cleanout

- Mockup
  - Grout removal demonstration
  - Floor saw installation and testing
  - Radiological assay system testing
Side View of B-Cell and Soil

- **Basement**
- **B-Cell**
- **Airlock Floor**

- **Pilot hole (drill zone)**
- **High Contamination**
- **Remote excavation zone (6’ to 8’)**
- **Normal excavation techniques for chasing contamination**

- **Sand**
- **Cobble**
- **Groundwater**
Airborne Contamination Mitigation

Dust shroud and seal → Soil transfer hose → Cyclone separator

Dust pre-filter → Pre-filter #2 and HEPA
• Frequent rad surveys of the drilling area and worker PPE are performed during drilling

• **Response Actions:** Installed additional seals around connections and a shroud around the casing to vacuum particulates. Stricter release requirements on equipment and personnel
Mockup Progress

Remote equipment operators and control station at Mockup

Successful grout demolition test
Floor saw - passed acceptance testing after cutting through the steel liner and concrete floor at the Mockup

Rad assay sensors and turn table - measures dose in waste bins brought into the Airlock
Groundwater Monitoring
Takeaway Points

• Removal of contaminated debris from B-Cell with remotely operated equipment is underway

• Use of the Mockup has proven invaluable for early testing of equipment, worker training, and incorporating lessons learned in to work packages prior to executing the work in a contaminated environment

• The focus is on safe and deliberate progress, resulting in a significant hazard reduction along the Columbia River