



618-10 Burial Ground Remediation Progress & Adjacent Waste Sites



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Aerial View of 618-10 Burial Ground and Adjacent Waste Sites



618-10

316-4

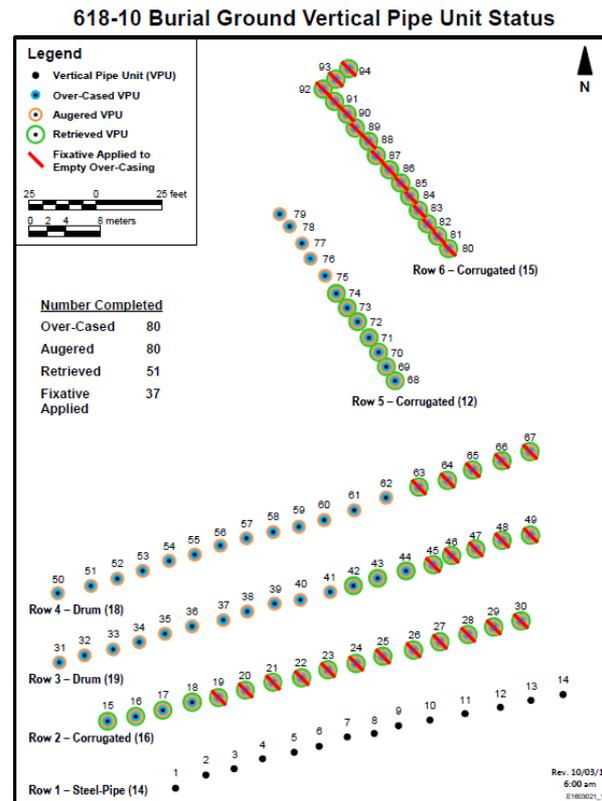
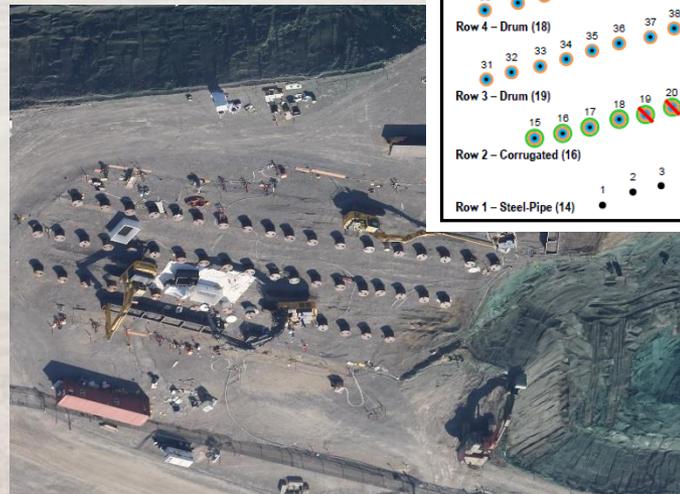
600-63



Overview of 618-10 Burial Ground

Initial Design:

- 12 discrete trenches at 20 to 25-foot depth; 126,505 bank cubic meters
- 2,254 drums (972 concrete-lined, 178 depleted uranium black oxide, 537 depleted uranium chips and oil, 47 zirconium chips, 40 thorium, 480 misc.)
- Miscellaneous debris waste
- 94 vertical pipe units (VPUs)



618-10 Project Transition Status



- Transition effective date was August 29, 2016
- Continuity of remediation activity was maintained by CH2M HILL Plateau Remediation Company (CHPRC), through the hiring of the Washington Closure Hanford (WCH) 618-10 Project team and roll over of existing project procedures, processes, and protocols



Trench Status

- More than 1,980 drums retrieved. About 309 drums remain; estimates based on legacy data, ground-penetrating radar (GPR), and field observations
- Safely shipped more than 352,800 tons of material to the Environmental Restoration Disposal Facility (ERDF)
- Concrete-shielded waste drums containing high dose items, debris drums as well as granular media drums are being processed with grout in trenches



Processing waste drums in grout



Drum retrieval in south trench, adjacent to the Vertical Pipe Unit field



Trench Status (cont'd)

- Trench drum excavation is scheduled for completion by the end of the first quarter of FY17, depending on the amount of drums discovered
- Completion of VPUs and the entire trench excavation is anticipated by the end of FY17



Loading drum/grout waste mix into lined Environmental Restoration and Disposal Facility (ERDF) containers



Vertical Pipe Units (VPU) Status

- 80 Corrugated/Drum VPUs:
 - 80 over-casings installed in FY15
 - 80 VPUs augured in FY16
 - 55 VPUs retrieved as of Oct. 14; expect to complete remaining VPUs in FY17



Clamshell bucket used for Vertical Pipe Unit waste retrieval



Equipment setup in Vertical Pipe Unit retrieval area



Steel VPU

- 14 Steel Pipe VPUs (Row 1)
- Project startup review and mockup testing underway
- Estimated retrieval start in first quarter of FY17
- Scheduled completion in fourth quarter of FY17

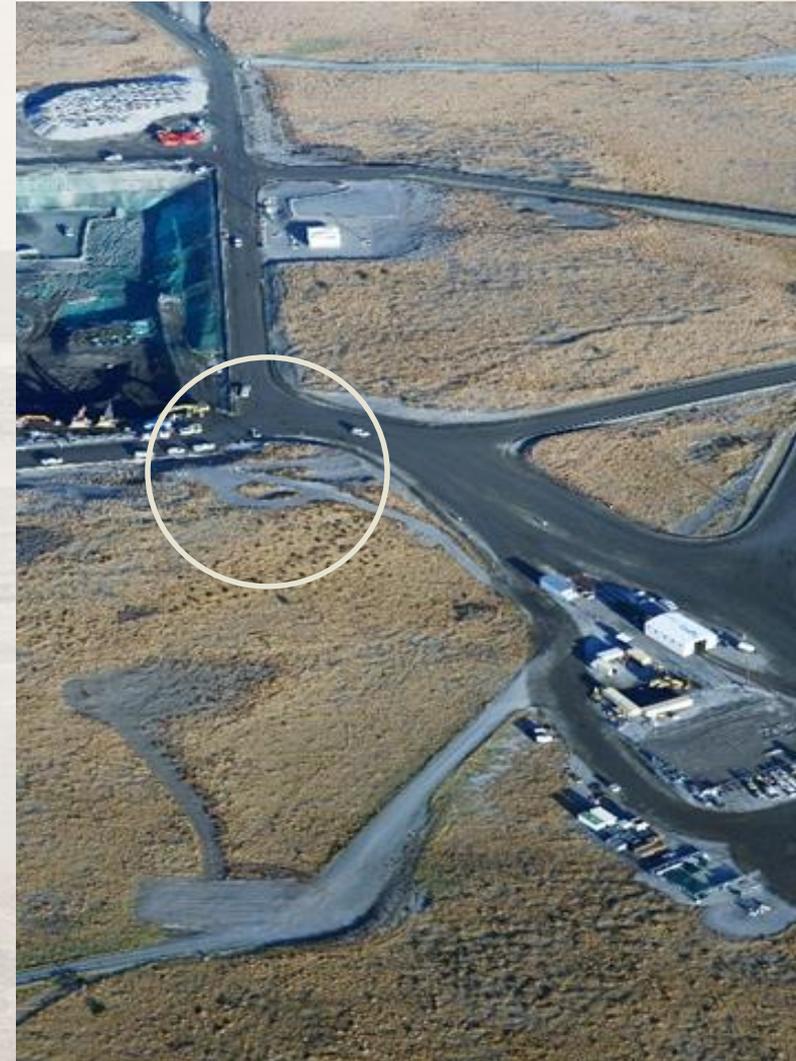


Steel Vertical Pipe Unit remediation mock-up



316-4 Waste Site Remediation Remove, Treat, Dispose

- Scope:
 - Complete remediation of 316-4 Waste Site adjacent to the 618-10 Burial Ground
 - Two bottomless tanks, buried 10 feet below grade, were removed in 2005
 - Remediation of residual contamination could not be processed below 27 feet, due to close proximity to 618-10
 - Site was backfilled and put on hold until work at 618-10 would not interfere with 316-4 excavation
 - Will excavate the remaining contamination, which may reach groundwater





316-4 Waste Site Remediation Technical Approach Remove, Treat, Dispose

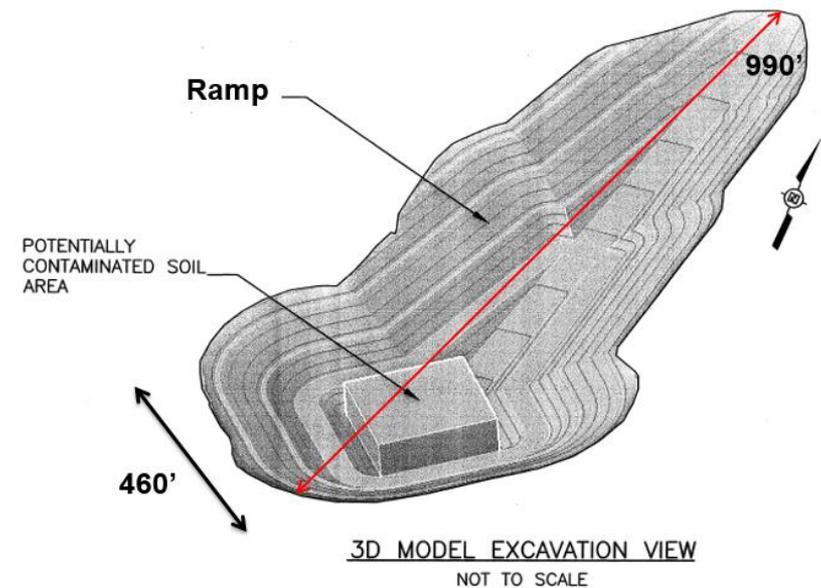
Approach:

1. Excavate ~26 feet overburden and stockpile
2. Excavate ~69 feet deep to groundwater

Waste removal:

- ~225,000 bank cubic meters to be excavated
- ~34,000 tons of low level waste to be disposed of at ERDF

Current Design





600-63 Waste Site Remediation

Remove, Treat, Dispose

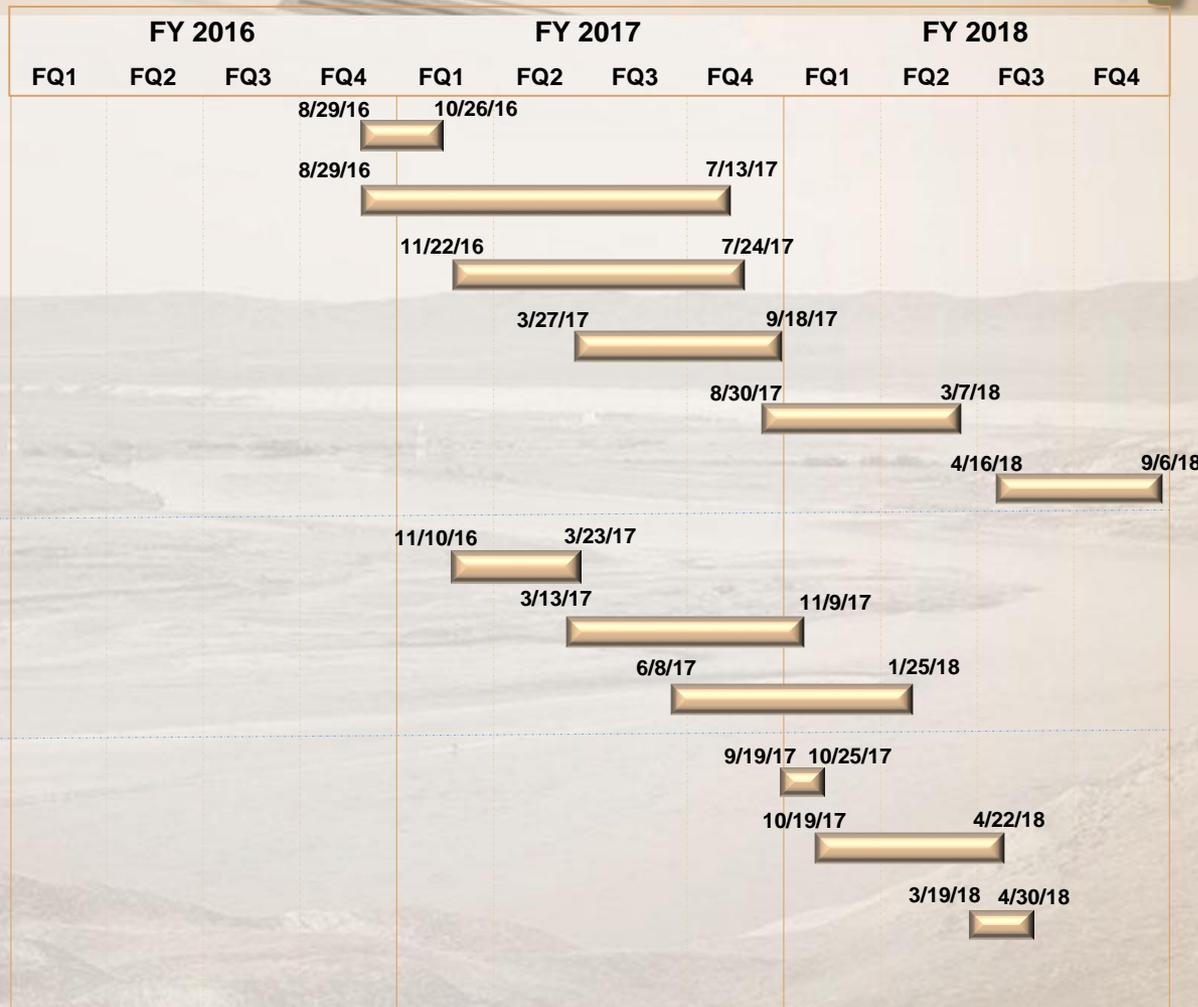
- Site adjacent to 618-10
- 36 feet x 19 feet wide
- 30 feet deep

In 1978, Pacific Northwest Laboratory used the 600-63 site to investigate groundwater recharge and radionuclide migration through soils at the Hanford Site.





618-10, 316-4, 600-63 Baseline Summary Schedule





618-10 Remediation Update

Questions?