



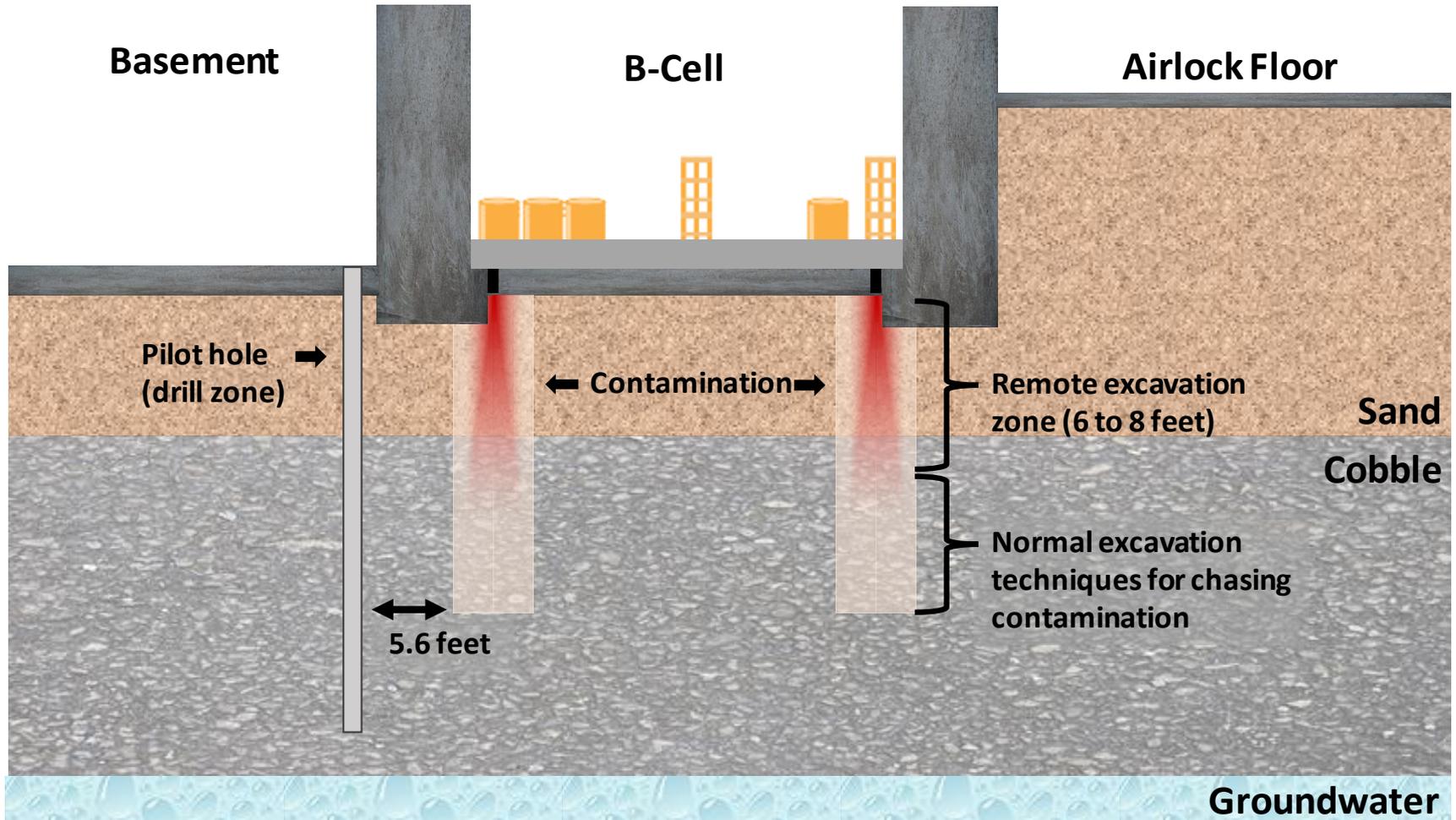
THE HANFORD SITE

Excavation of Contaminated Soil under 324 Building (Waste Site 300-296)

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DOE Richland Operations Office
March 12, 2019

- Pilot Holes (drilling into soil near contaminated area under building—waste site 300-296)
- Mock-up Activities
- Groundwater Monitoring
- Cleanup Levels

Side View of B-Cell and Soil



THE HANFORD SITE | Pilot Hole Drill Rig



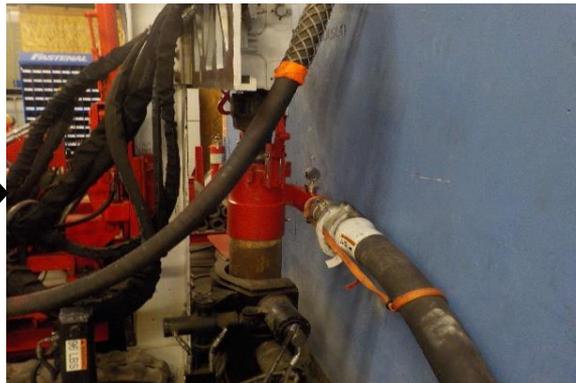
Drill rig



Drilling demonstration in protective gear



Dust suppression seal



Soil transfer hose



Cyclone separator



Dust pre-filter

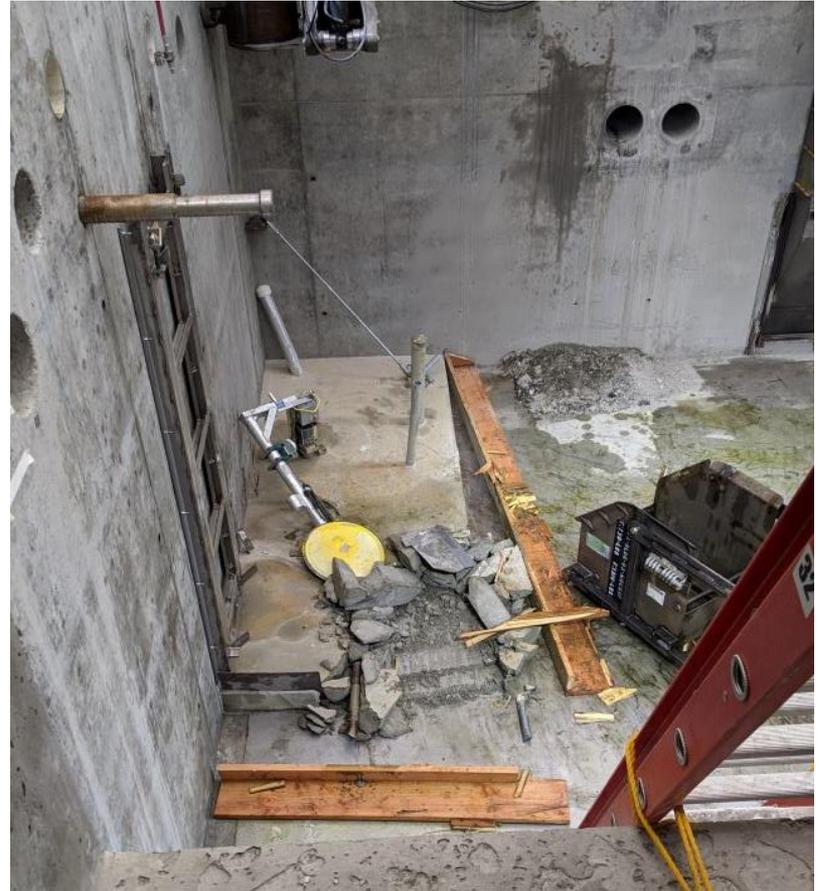


Pre-filter #2 and HEPA filter

THE HANFORD SITE | Mock-up Progress



Remote equipment operators and control station at mock-up



Successful grout demolition test

THE HANFORD SITE | Mock-up Progress (cont.)



Floor saw for test cutting the mock-up floor this spring



Rad assay sensors and turntable for measuring dose in waste bins brought into the airlock

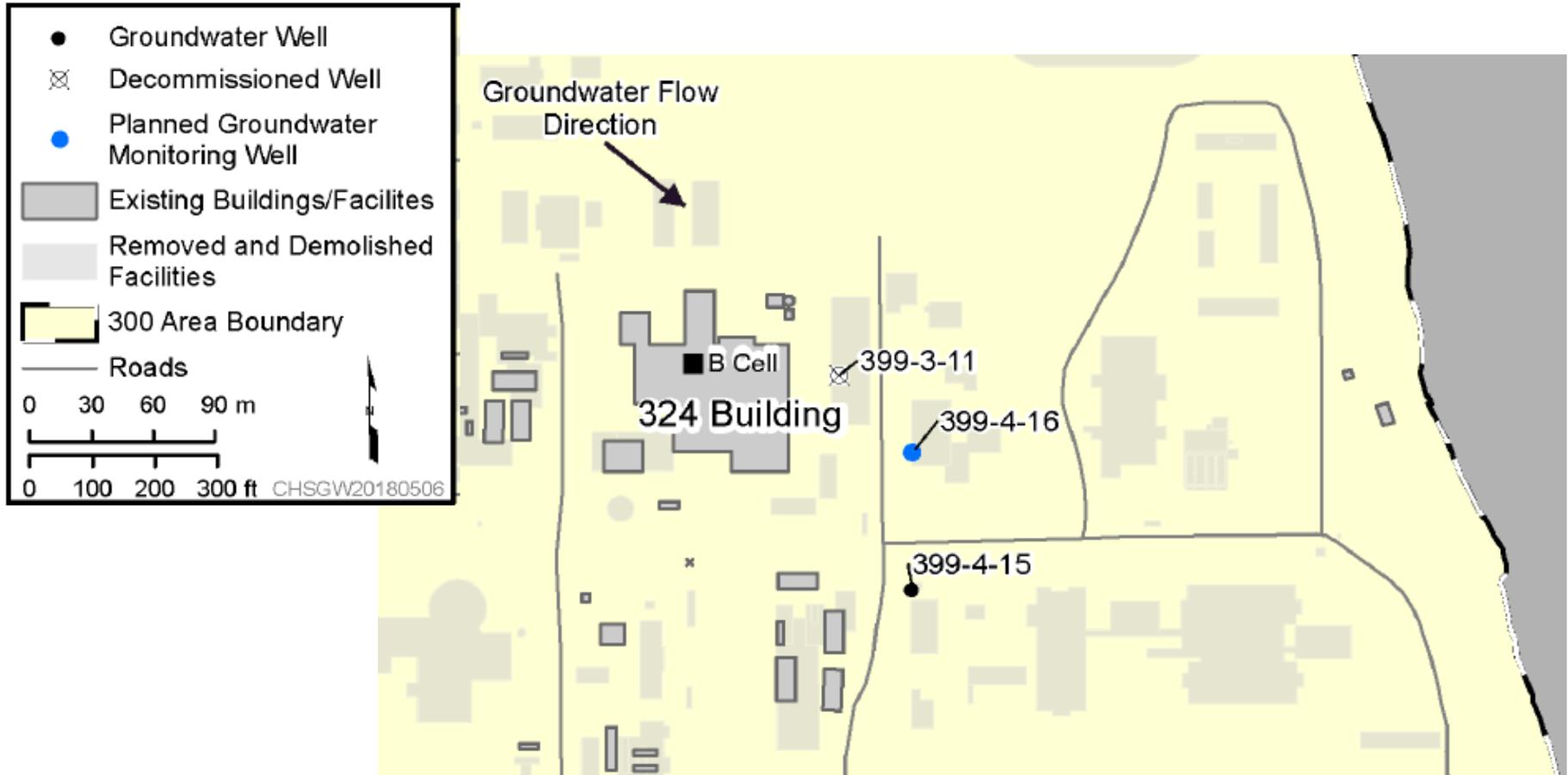


Table 4: Cleanup Levels for 300-FF-2 COCs – Soil, Structures and Debris
 Media: Soil, Structures and Debris
 Site Area: 300-FF-2
 Controls to Ensure Restricted Use: Yes.

Contaminant	Units	Residential Cleanup Areas Outside both the 300 Area Industrial Complex and 618-11			Industrial Cleanup Areas within the 300 Area Industrial Complex and 618-11		
		Shallow Zone ≤ 15 ft bgs Direct Exposure Human Health		Soil CUL for GW & River Prot. Surface to GW	Shallow Zone ≤ 15 ft bgs Direct Exposure Human Health		Soil CUL for GW & River Prot. Surface to GW
		CUL	Basis for CUL		CUL	Basis for CUL	
Americium-241	pCi/g	32	RA	--	210	RA	--
Cesium-137	pCi/g	4.4	RA	--	18	RA	--
Cobalt-60	pCi/g	1.4	RA	--	5.2	RA	--
Europium-152	pCi/g	3.3	RA	--	12	RA	--
Europium-154	pCi/g	3.0	RA	--	11	RA	--
Europium-155	pCi/g	125	RA	--	518	RA	--
Iodine-129	pCi/g	0.076	RA	12.8	1,940	RA	37.1
Plutonium-238	pCi/g	39	RA	--	155	RA	--
Plutonium-239/240	pCi/g	35	RA	--	245	RA	--
Plutonium-241	pCi/g	854	RA	--	12,900	RA	--
Technetium-99	pCi/g	1.5	RA	272	166,000	RA	420
Total beta radiostromtium (Strontium-90)	pCi/g	2.3	RA	227,000	1,970	RA	--
Tritium	pCi/g	459	RA	9,180	1,980	RA	12,200
Uranium-233/234	pCi/g	27.2	RA	--	167	RA	--
Uranium-235	pCi/g	2.7	RA	--	16	RA	--
Uranium-238	pCi/g	26.2	RA	--	167	RA	--
Uranium isotopes total	pCi/g	56.1	RA	--	350	RA	--

Source: 300 Area ROD
 Table 4 page 37.
 Administrative Record
 Accession #0087180