

Agency of Natural Resources

Department of Environmental Conservation Waste Management and Prevention Division

Vermont Yankee Decommissioning NDCAP – DEC Update Graham Bradley, May 13, 2024

DEC Role: Regulate Vermont Rules & Memorandum of Understanding

Ongoing communication & coordination
 Oversight of non-radiological remediation:

Site Investigation
 Corrective Actions
 Post Demolition Surveys
 Long Term Monitoring
 Permitting – with other DEC programs



Activity Summary December 2023 to May 2024

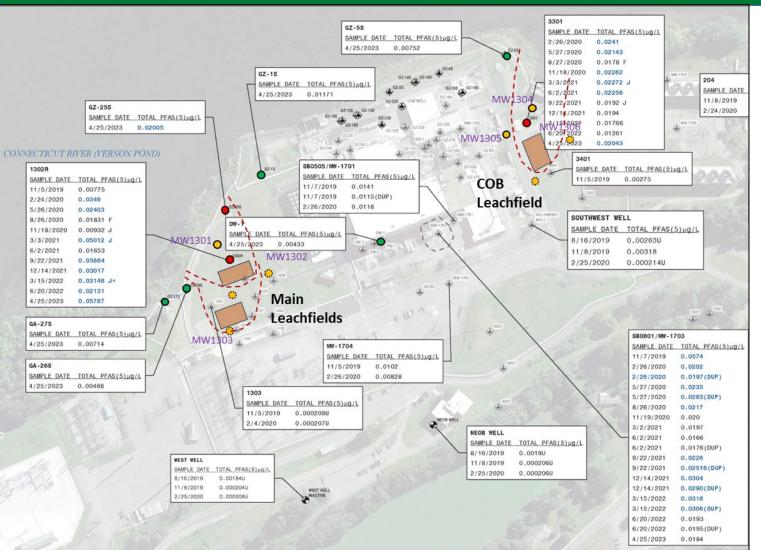
- Non-Radiological Investigation & Remediation
 - Site Investigation Leachfield PFAS groundwater investigation (April/May 2024)
 - Post Demolition Surveys (part of investigation)
 - Advanced Off-Gas Building (January 2024)
 - AOC 11 "New Warehouse" location (February 2024)
 - Corrective Actions
 - AOC 5 former Diesel Oil Tank southwest of former Turbine Building (April/May 2024)
 - AOC 7a former 75,000 gallon Fuel Oil Storage Tanks (April/May 2024)
- DEC Permitting
 - Drinking Water, Direct Discharge, Stormwater, River Alteration



Dept. of Environmental Conservation

Site Investigation

PFAS in Groundwater Investigations



Investigation & Remediation of Contaminated Properties Rule

- PFAS identified downgradient of leachfields
 12 to 50 ppt (current standard 20 ppt)
- Report is required to "Identify the source, degree, and spatial extent of contamination"
- DEC reviewed Haley & Aldrich workplan and agreed monitoring well locations
- Groundwater samples being taken
- DEC will determine if this IRule requirement has been achieved



Post Demolition Surveys

Advanced Off-Gas Building Area (Jan. 2024)

1	No. No.	ALDRICH			HEADSPACE SCREENING REPORT			
FORMER CONSTRUCTION OFFICE BUILDING	CONTAINMENT ACCESS BUILDING	IMENT BUILDING CED OFF-GAS		rmont Yankee Nuclear Power Station Ivanced Off Gas Building (AOG) orthStar Nuclear Decommissioning Co., LLC. iniRae 3000 1/17/2024 LAMP (eV) 10.6			H&A FILE NO. PROJECT MGR. FIELD REP DATE SAMPLED 10.6 DATE SCREENED	
a server the server the	BUILDING			E			ESD SCREENING LOC.	
REACTOR		Exploration	Sample Number	Depth (ft)	Sample Description	Sample Reading (ppm) ⁽²⁾	Back- Ground Reading (ppm) ⁽²⁾	Remarks
TURBINE BUILDING		HS-01		0-0.25	Brown C to F SAND, some gravel	0.0	0.0	No Staining or odor
		HS-02		0-0.25	Brown C to F SAND, some gravel	0.0	0.0	No Staining or odor
	WAREHOUSE	HS-03		0-0.25	Brown C to F SAND, some gravel	0.0	0.0	No Staining or odor
		HS-04		0-0.25	Brown C to F SAND, some gravel	0.2	0.0	No Staining or odor
		HA-05		0-0.25	Brown C to F SAND, some gravel	0.0	0.0	No Staining or odor
		HS-06		0-0.25	Brown C to F SAND, some gravel	0.0	0.0	No Staining or odor
1 Contra	Letter in st	HS-07		0-0.25	Brown C to F SAND, some gravel	0.0	0.0	No Staining or odor

- Contamination not expected, but located west of fuel pipes
- Conducted by H&A observed by Atlas Environmental
- No observed visual, olfactory, and PID evidence (7 locations)
- No evidence of Total Organic Vapors (TOVs)

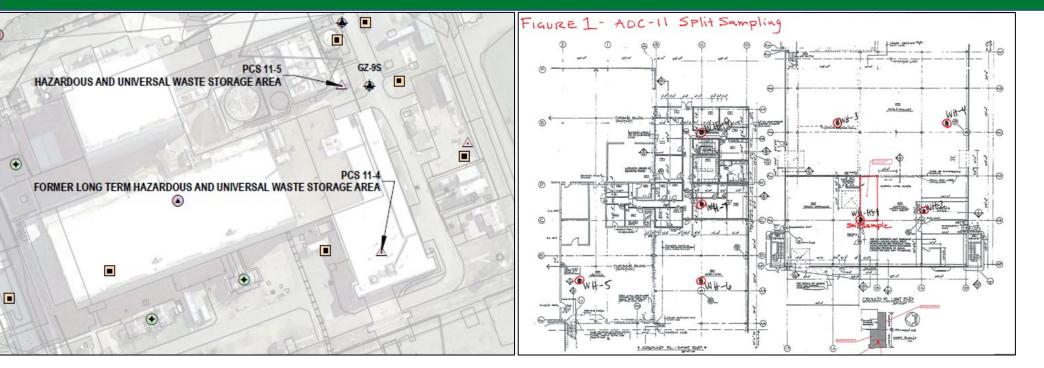




Post Demolition Surveys

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"New" Warehouse Area (Feb. 2024)



- Contamination not expected
- Conducted by H&A observed by Atlas Environmental
- No observed visual, olfactory, and PID evidence (8 locations)
- One sample analyzed for semi-volatile organic compounds; below VT resident standards



Corrective Action

AOC 5 – Former Diesel Oil Tank (April/May 2024)

- Leak reported during plant operations, but too close to the building to remediate
- Soils excavated based on visual & PID readings, then clean boundaries sampled
- H&A collected 50 confirmatory soil samples from excavation sidewalls (including QA/QC)
- Atlas collected 6 split samples and 1 QA/QC
- Clean boundaries have been confirmed





Corrective Action

AOC 5 – Former Diesel Oil Tank (April/May 2024)

DEC preliminary understanding:

Excavation larger than expected (approximately 10,000 cubic yards ?)

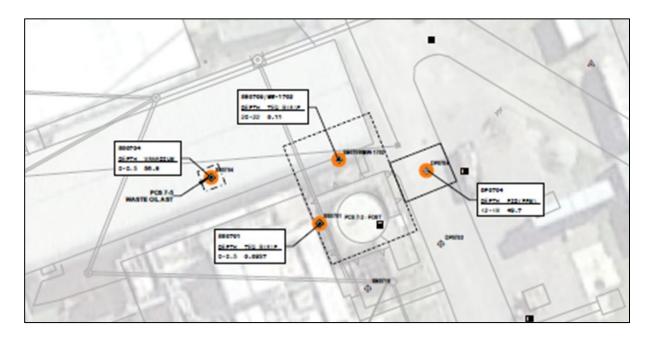
- Approximately 3,500 cubic yards (?) impacted soil shipped to WCS
- Cut foundations to gain access to contaminated soil
- Non impacted soil stockpiled on concrete slab for radiological screening and potential reuse as backfill, after testing.



Corrective Action

AOC 7a – former 75,000 gallon Fuel Oil (April/May 2024)

- Leak reported during plant operations, but below the tank vault (inaccessible)
- Initial remediation excavation complete
- H&A and Atlas took confirmation samples last week (May 9, 2024)
- Waiting on laboratory results



• Both AOC 5 & 7a areas to be backfilled following confirmation from the lab analyses that all impacted soils have been excavated.



Permitting

- Public Drinking Water Program (DWGPD)
 - On-site well. Routine compliance. No issues.
- Direct Discharge (WMD)
 - None. No permit change being sought at this time.
- Stormwater Program (WMD)
 - Routine inspections to ensure stormwater and sediment control
- Rivers Program (WMD)
 - Rivers Program to respond to Stream Alteration Permit change.