



BNL Environmental Compliance and Groundwater Protection Update

Community Advisory Council

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May 14, 2026



Agenda

Environmental Compliance Program

- Dashboard – Key Environmental Programs

Groundwater Protection Program

- Dashboard – Key Long Term Stewardship Projects
- Progress Update
 - William Floyd Well Field Sentinel Monitoring
 - Current Firehouse/Building PFAS Characterization
 - Building 526 Pre-Demolition Sampling Results



Environmental Compliance Update

Environmental Compliance Programs/Processes Status



Environmental Program/Process	Performance/ Trend	More information
Drinking Water (Safe Drinking Water Act)	—	
Liquid Effluents (Clean Water Act)	—	i
Non-Rad Air Emissions (Clean Air Act)	—	i
Spill Response	—	i
Radiological Air Emissions	—	
Underground & Aboveground Tank Storage	—	i
Waste Management	—	
Energy & Water Efficiency	—	
Environmental Permits	—	
National Environmental Policy Act	—	
Natural Resources	—	i
Cultural Resources	—	
Assessments/Regulatory Inspections	—	

— No change

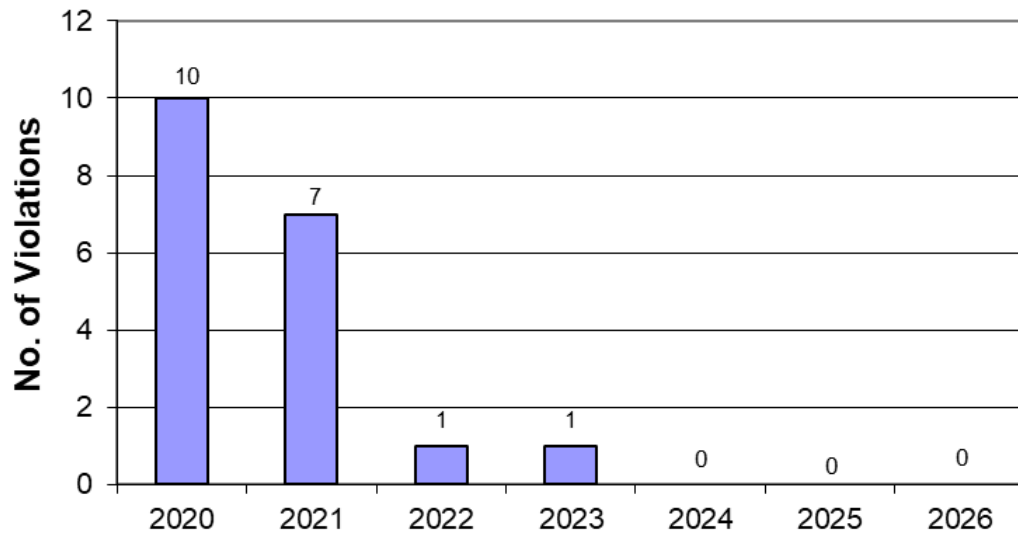
↑ Improvement

↓ Decline

*“All programs
stable with
no trends of
concern”*

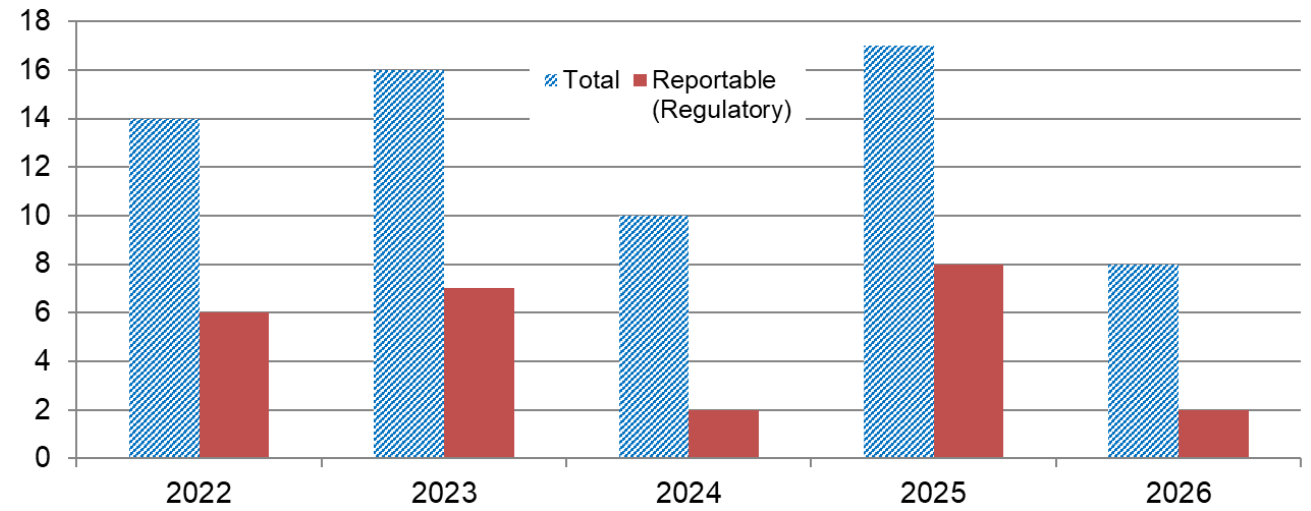
Environmental Program Metrics

SPDES Limit Violations (2020 - 2026)

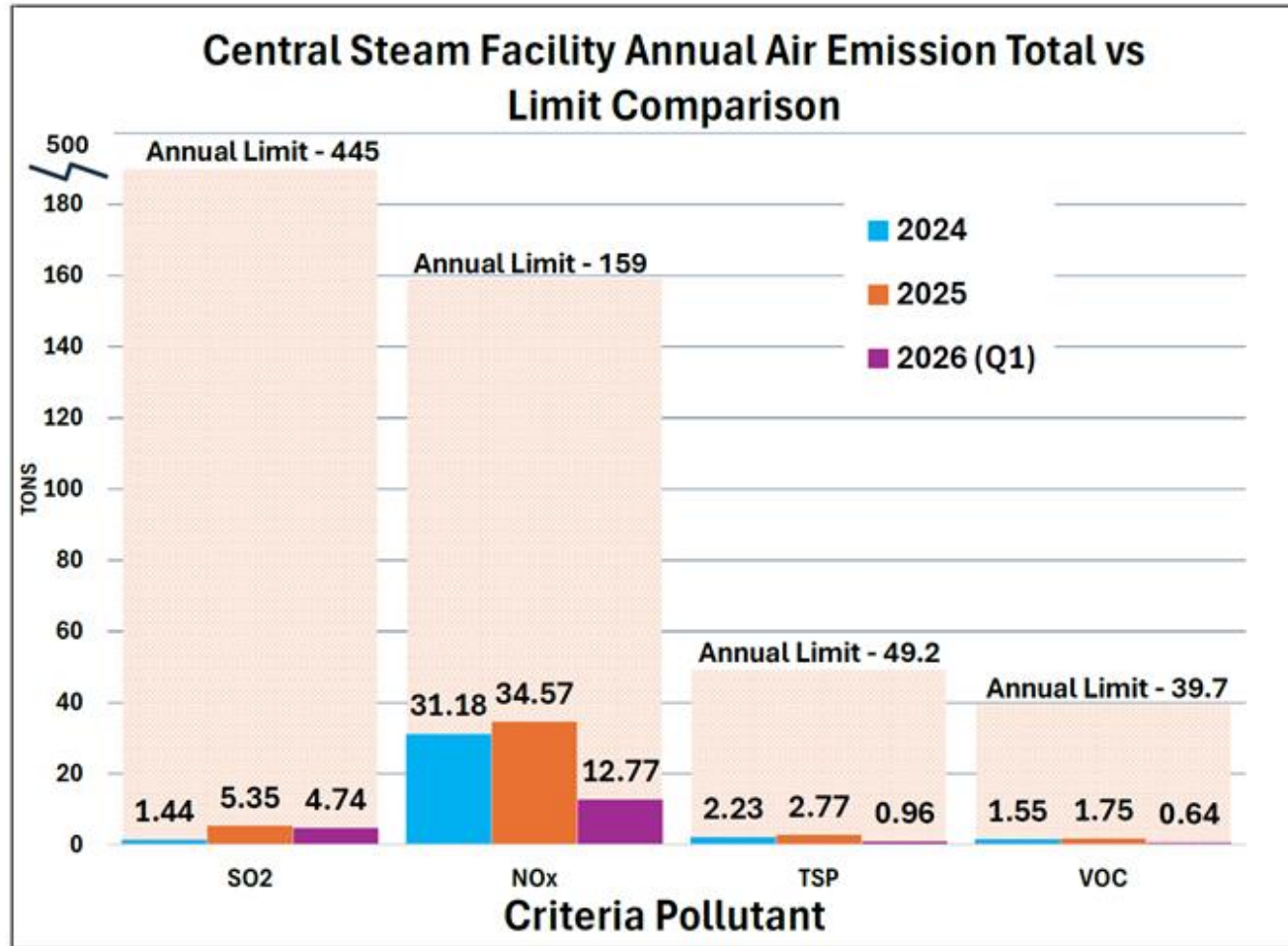


State Pollutant Discharge Elimination System (SPDES)

Spills Trend (2022 - 2026)



Environmental Program Metrics (cont.)



**No change since
April 2026**

SO₂ – Sulfur dioxide

TSP – Total Suspended Particulates

NO_x – Nitrogen Oxides

VOC – Volatile Organic Compounds

Environmental Program Updates

Chemical Bulk Storage (CBS)

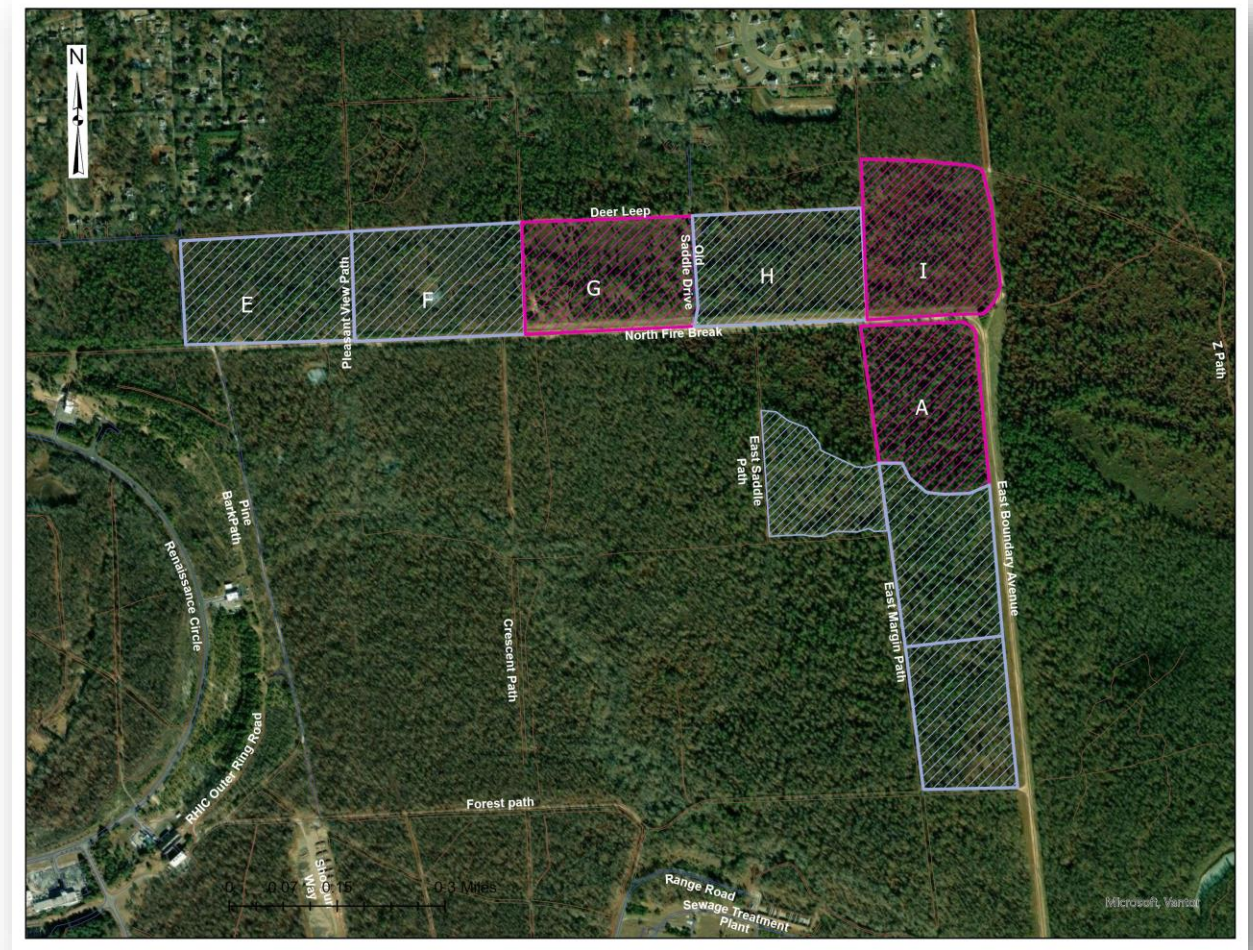
- Inspection of registered CBS tank containing 15% sodium hypochlorite identified product in the secondary containment.
- Although no release to the environment, spill into containment was reportable to NYSDEC.
- Cause determined to be a leak from the pump located on top of tank that entered the secondary containment during transfer operations.
- Tank now empty, and repairs are being made.



Environmental Program Updates

Natural Resources

- Burn units have been prepped and are ready for fire once weather conditions are favorable
- Working with the NYSDEC and Pine Barrens Commission to prep and coordinate resources for possible burns this month



Groundwater Protection Update

VOC Remediation Systems

No change since
April 2026

System	Operations	Status	
OU I – South Boundary	1996 – 2019	Closed – Monitoring Ongoing	
OU III – Middle Road/South Boundary	1997 –	In Operation	
OU III – Industrial Park & Modification	1999 – 2025	Closed – Monitoring Ongoing	
OU III – Carbon Tetrachloride	1999 – 2010	Closed – Goals Met	
OU III – Building 96	2001 –	In Operation	Anticipate Petition for Shutdown in 2026-2027
OU III – Western South Boundary	2002 –	In Operation	
OU III – Industrial Park East	2004 – 2014	Closed – Goals Met	
OU III – North Street	2004 – 2020	Closed – Monitoring Ongoing	
OU III – North Street East – VOCs	2004 – 2020	Shutdown – Monitoring Ongoing	
OU III – North Street East – EDB	2020 – 2026	Shutdown – Monitoring Ongoing	
OU III – LIPA	2004 – 2025	Closed – Monitoring Ongoing	
OU III – Airport	2004 –	In Operation	
OU III – Freon-11	2012 – 2019	Closed – Goals Met	
OU IV – ASVE	1997 – 2003	Closed – Goals Met	Legend
OU V – MNA of VOCs	NA	Closed – Goals Met	
OU VI – EDB	2004 –	In Operation	

Legend

On Track

Concerns on Attaining Goals

Closed – Goals Met

Radiological Systems

No change since
April 2026

System	Operations	Status
Operable Unit (OU) I – Former Hazardous Waste Management Facility Strontium 90 (Sr-90)	NA	Monitoring Ongoing
OU III – Brookhaven Graphite Research Reactor/Waste Concentration Facility (BGRR/WCF) (Sr-90)	2005 –	In Operation
OU III – Chemical Holes (Sr-90)	2003 – 2018	Shutdown – Monitoring Ongoing
OU III – High Flux Beam Reactor (HFBR) Pump & Recharge (Tritium)	1997 – 2019	Closed – Monitoring Ongoing
OU IV – Building 650 Sump Outfall (Sr-90)	NA	Monitoring Ongoing
OU VIII – g-2 & Brookhaven Linac Isotope Producer (BLIP) (Tritium)	NA	Monitoring Ongoing

PFAS Remediation Systems

System	Operations	Status
OU X – Current Firehouse/Building 170	2022 –	In Operation
OU X – Former Firehouse	2023 –	In Operation

Legend

On Track

Concerns on Attaining Goals

Closed – Goals Met

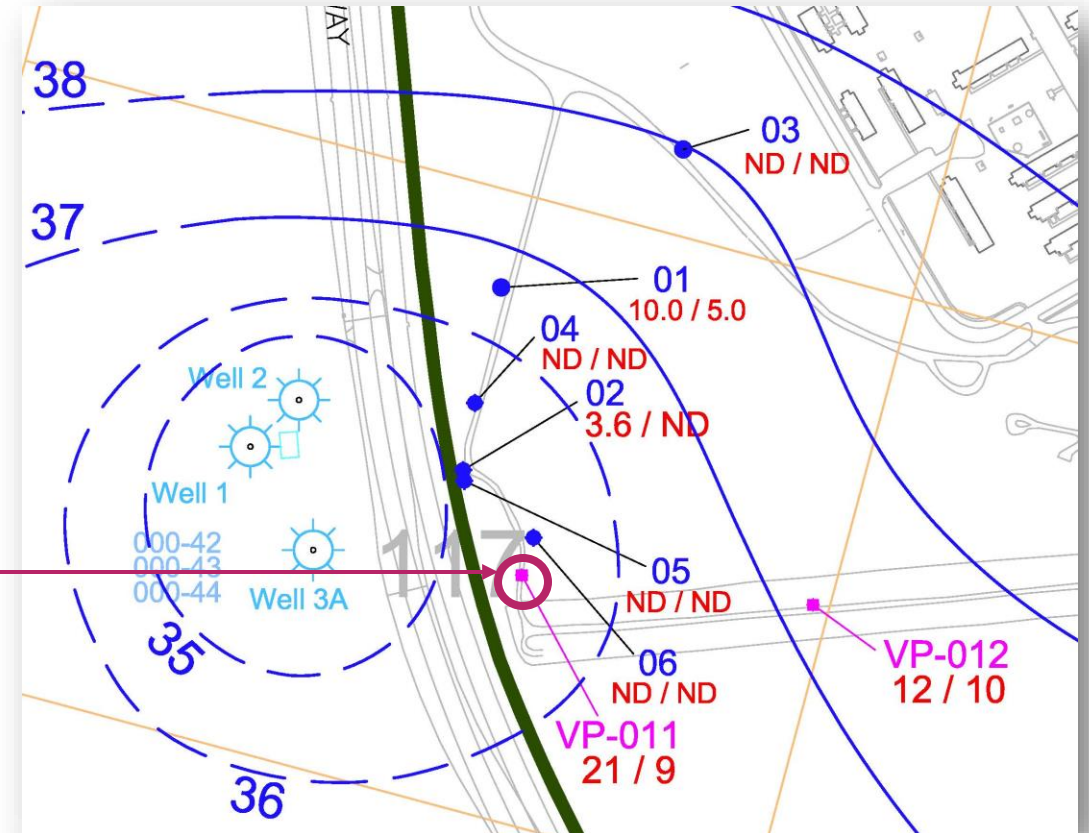
Groundwater Updates

- 2025 Groundwater Status Report: *Underway*
- 2026 CERCLA Five-Year Review submittal to regulators: *Forthcoming*
- Characterization of the Current Firehouse/Building 170 PFAS plume: *Underway*
- Two additional monitoring wells installed to enhance William Floyd Well Field sentinel monitoring: *Completed*
- Pre-demolition soil sampling at Building 526: *Completed*



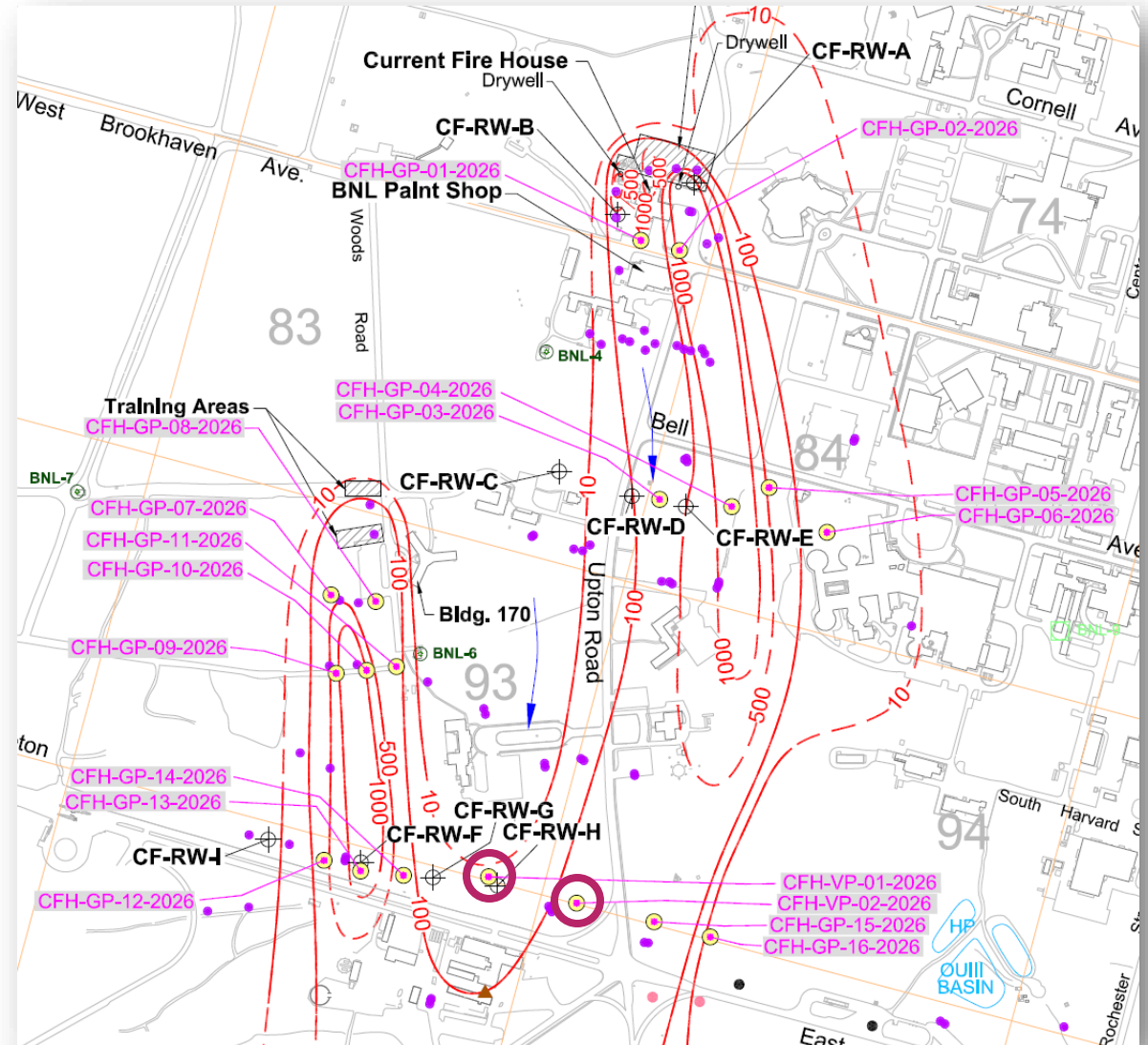
William Floyd Well Field Monitoring

- Added two new monitoring wells at the location of the 2024 vertical profile VP-011
- Co-located monitoring wells, one screened at 80-90' below ground surface, and one screened at 182-192' bls
- Will be sampled starting in the 2nd quarter 2026 and added to the routine monitoring schedule



Current Firehouse/Building 170 PFAS

- Work is being completed to address "prioritized risks"
- Two "deep" vertical profile borings completed to 190' bls
- 16 "shallow" (75-150' bls) are underway
- No results to share yet
- Results will be incorporated into design plan for supplemental extraction wells
- Have increased pumping rate in source area extraction wells RW-A and RW-B

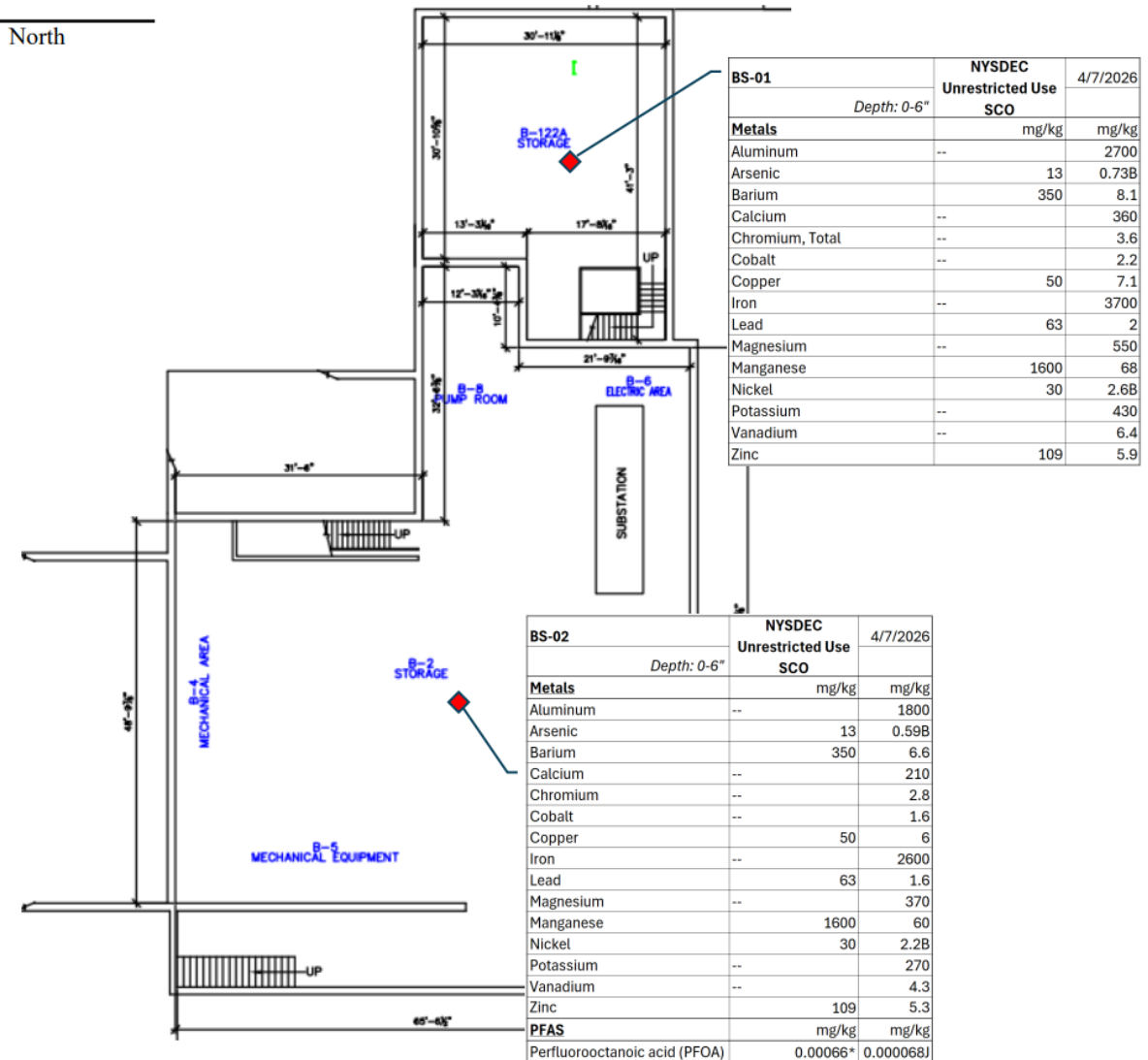


Building 526 Pre-Demolition Soil Sampling



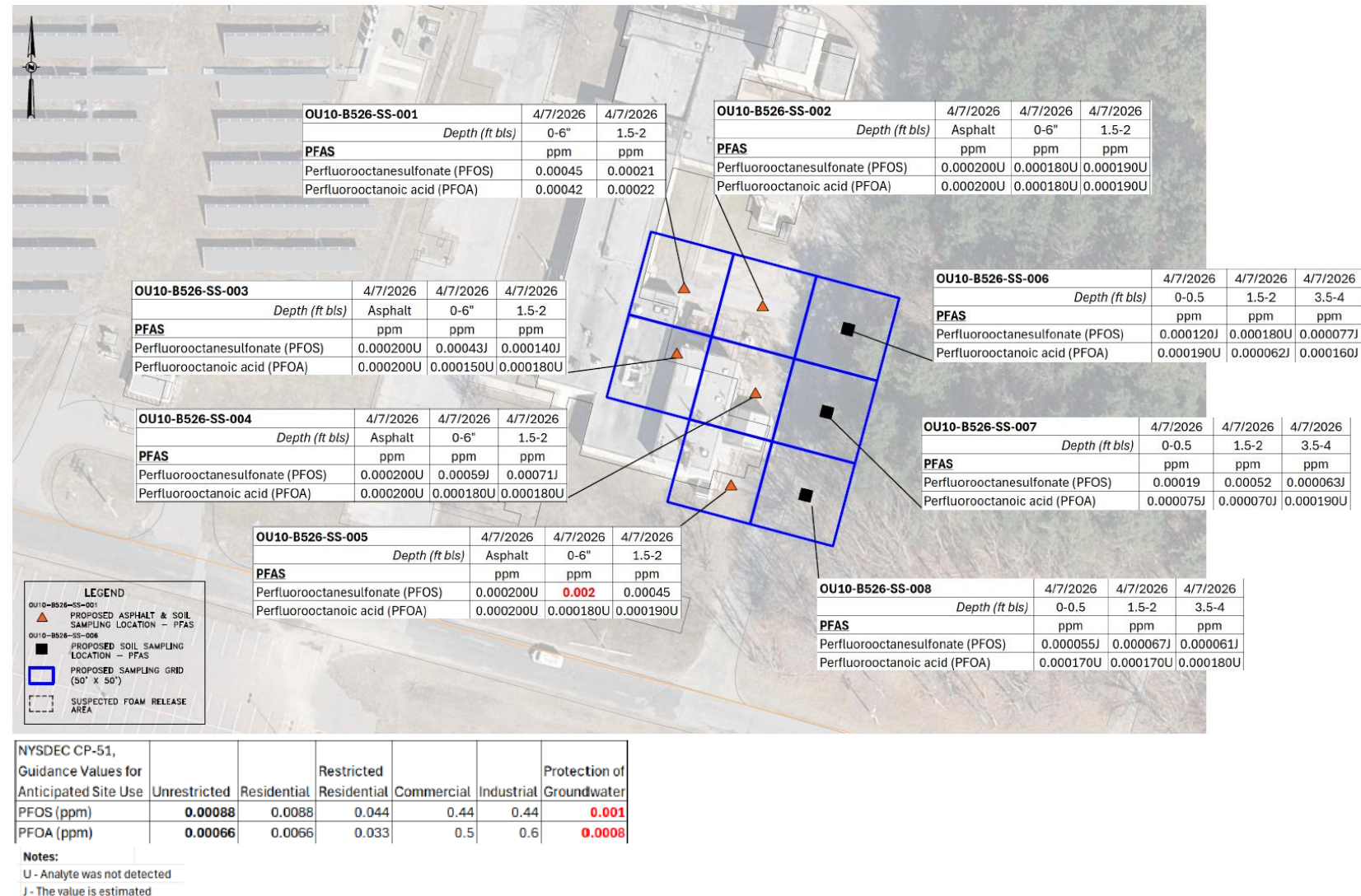
North

- Chemical results were non-detect or below Unrestricted Use Soil Cleanup Objectives
- Radiological results were non-detect or below background



Building 526 Pre-Demolition Soil Sampling

- Progress towards completing portions of the OU X Remedial Investigation Scope
- One sample slightly above Protection of Groundwater Soil Cleanup Guidance Value for PFOS
- Building demolition to proceed as planned



Thank you!

Questions, Feedback, Open Discussion