



Update on BNL Environmental Compliance and Groundwater Protection

Community Advisory Council

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September 24, 2026



Agenda

Groundwater Protection Update

- Dashboard – Key Long Term Stewardship Projects
- Progress Update
- 2026 Five-Year Review Completion

Environmental Compliance Program

- 2025 Site Environmental Report Overview



Groundwater Protection Update

VOC Remediation Systems

No change since
May 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 Projects

No change since
May 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
- Characterization of the Current Firehouse/Building 170 PFAS plume
- Characterization of the BGRR and Building 650 Sr-90 Plume
- Characterization of the OU I Former Hazardous Waste Management Sr-90 Plume
- PFAS Impacted Soil Disposal
- 2026 CERCLA Five-Year Review



Five-Year Review Report

for

Brookhaven National Laboratory Superfund Site (NY7890008975)

Town of Brookhaven, Hamlet of Upton

Suffolk County, New York

August 2026

PREPARED FOR:

The United States Department of Energy

Office of Science

PREPARED BY:

Environmental Protection Division

Brookhaven National Laboratory

Upton, New York 11973



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2026 CERCLA Five-Year Review

What is the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Five-Year Review?

Required at Superfund sites where hazardous substances remain above levels that permit unlimited use and unrestricted exposure

Provide an opportunity to evaluate the implementation and performance of a remedy to determine whether it remains protective of human health and the environment

Five-Year Review Process:



2026 CERCLA Five-Year Review

Protectiveness Determinations:

1. **Protective**
2. **Short-term Protective: protective in the short-term; however, in order for the remedy to be protective in the long-term, follow-up actions need to be taken**
3. **Protectiveness Deferred: not protective, unless action is taken in order to ensure protectiveness**
4. **Not Protective: protectiveness cannot be determined until information is obtained**

2026 CERCLA Five-Year Review

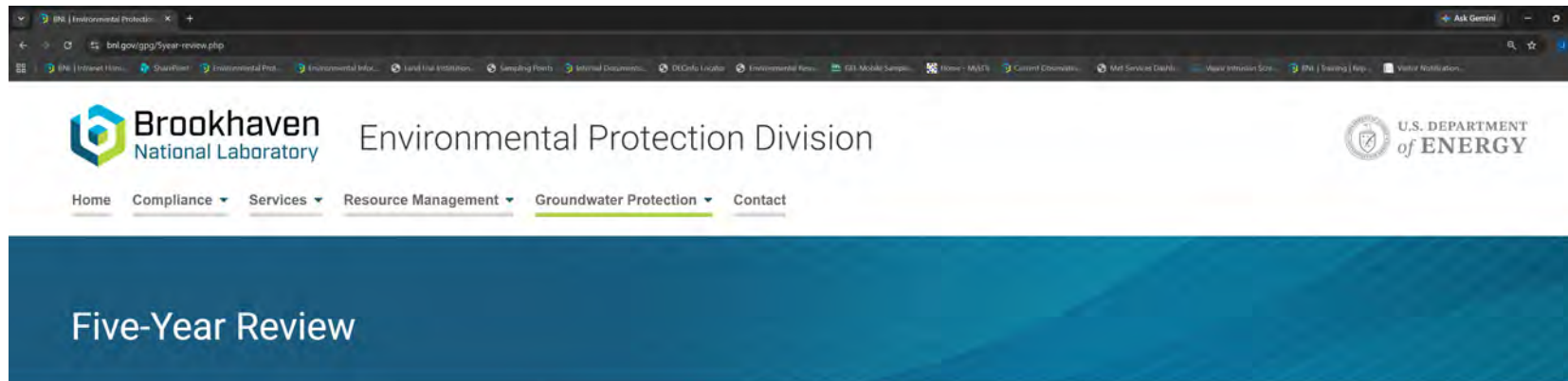
Protectiveness Determinations by Operable Unit

Operable Unit	Protectiveness Determinations
OU I – Radiologically Contaminated Soil, Radiological and VOC Contaminated Groundwater (FHWMF, Former & Current Landfills)	Protective
OU III – Groundwater On- and Offsite	Short-term Protective
OU IV – Soil and Groundwater Onsite (Central Steam Facility, 650 Sump & Outfall)	Protective
OU V – Sewage Treatment Plant	Protective
OU V – Peconic River	Protective
OU VI – Ethylene Dibromide (EDB) in Groundwater Offsite	Short-term Protective
OU VIII – g-2/BLIP/USTs	Protective
OU IX – HFBR HFBR Radiologically Contaminated Structures and Soil	Short-term Protective
<i>OU X – PFAS and 1,4-Dioxane</i>	<i>Not Applicable</i>
OU XI – BGRR	Protective

2026 CERCLA Five-Year Review

Notification of Availability and Access

Website: <https://www.bnl.gov/gpg/5year-review.php>



← 2026

The U.S. Department of Energy has completed the fifth Five-Year Review for the Brookhaven National Laboratory (BNL) site, as required by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This review serves to ensure that the implementation and performance of the selected cleanup remedies continue to be effective in protecting human health and the environment. This report reviewed the remediation work performed at the BNL site, including remediation of groundwater contamination on and off of BNL property, excavation and disposal of contaminated soils and river sediments, removal of above- and below-ground storage tanks, capping of landfills, decommissioning activities and long-term surveillance and maintenance at the former Brookhaven Graphite Research Reactor and High Flux Beam Reactor. Land-use restrictions and institutional controls are in place to ensure that any residual contamination is not dispersed and does not adversely affect human health or the environment. Information on the selected remedies at BNL as well as the status of remediation activities at the site is available on the [BNL Groundwater Protection website](#).

[Entire Five-Year Review](#)

[Final Public Notice](#)

Thank you!

Questions, Feedback, Open Discussion