

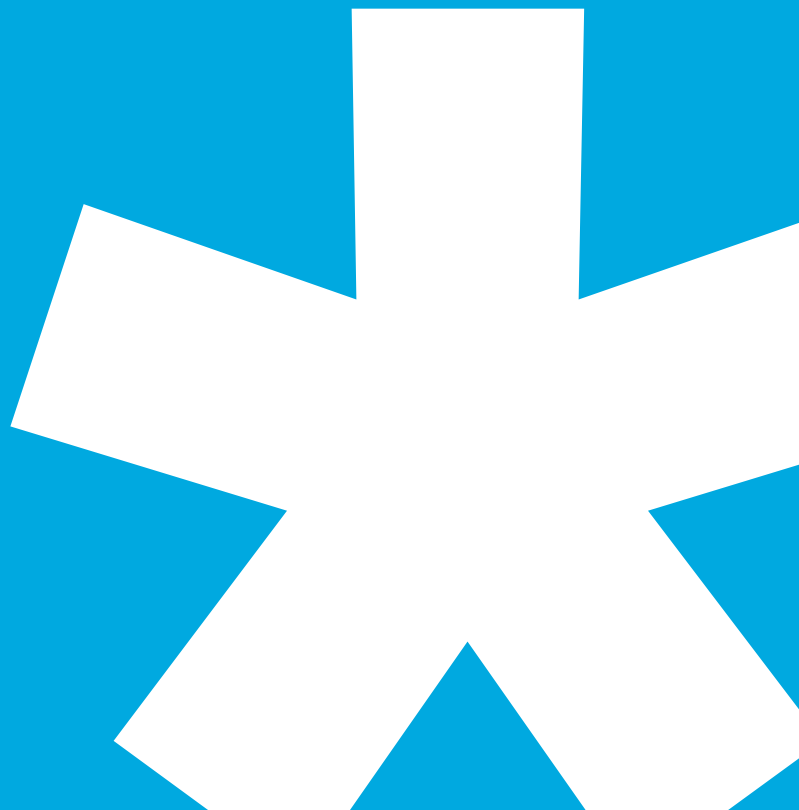


A Siemens Healthineers Company

Technical Advisory Group (TAG) Meeting

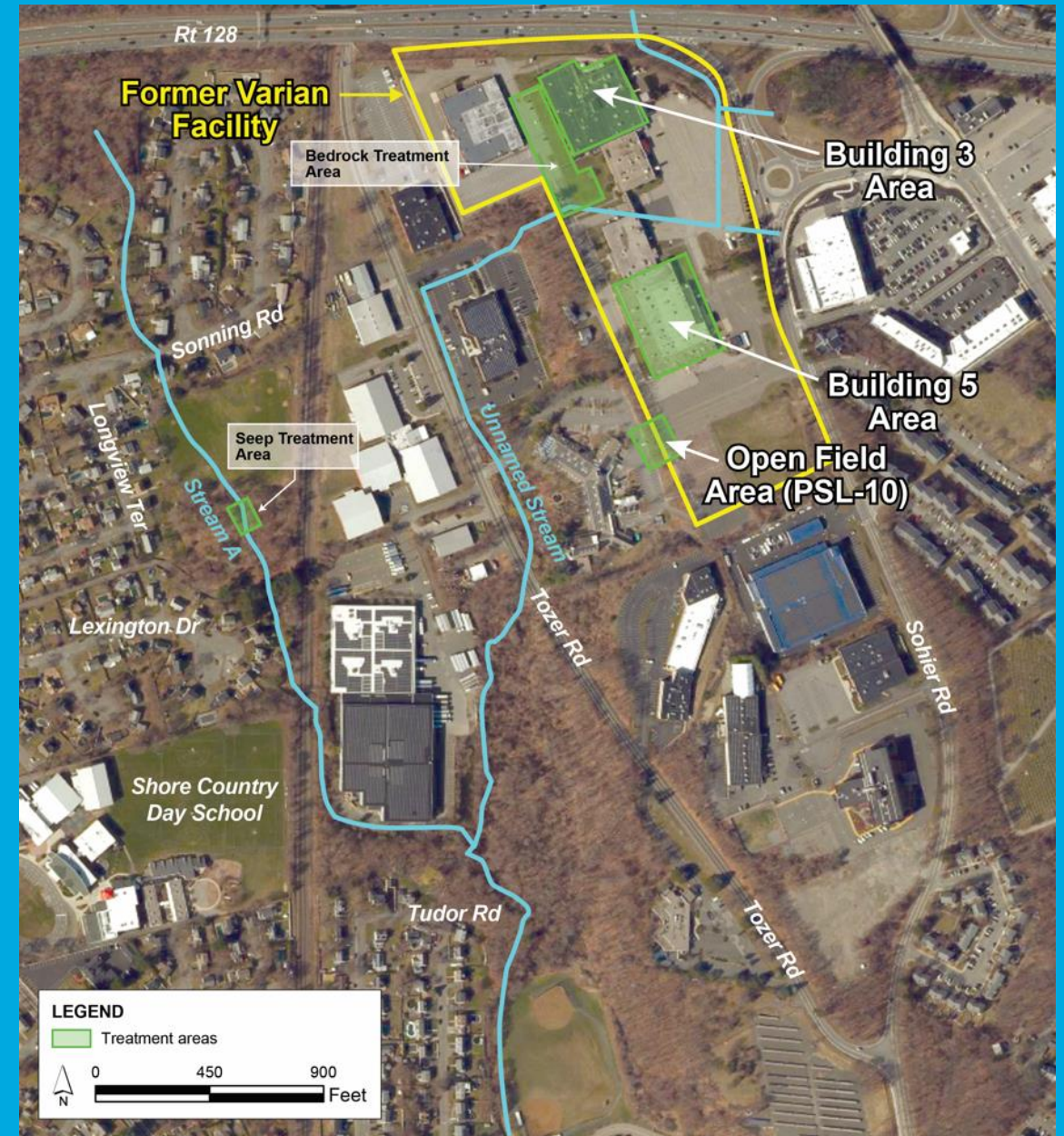
Former Varian Facility (Site 3-0485)
150 Sohier Road
Beverly, Massachusetts

Tuesday, January 27, 2026
Virtual Meeting (Teams)



Presentation Objectives

- Provide a status update on treatment system operations, monitoring, and construction
- Answer questions from the TAG



Status Update on Treatment System Operations, Monitoring, and Construction



Summary of Activities Since the October 2025 Public Meeting

- **Bedrock Treatment**
Stage 2 bedrock injections completed
- **Building 3 Area Thermal Treatment System**
Drilling continues along with site preparation
- **Building 5 Area Treatment**
Drilling to start this week (pending weather)
- **PSL-10 Subgrade Biogeochemical Reactor**
SBGR monitoring continues
- **Stream A Reactive Core Mat**
Inspections continue with no issues observed
- **Site Monitoring**
Routine groundwater and indoor air testing continues

Bedrock packer
installation



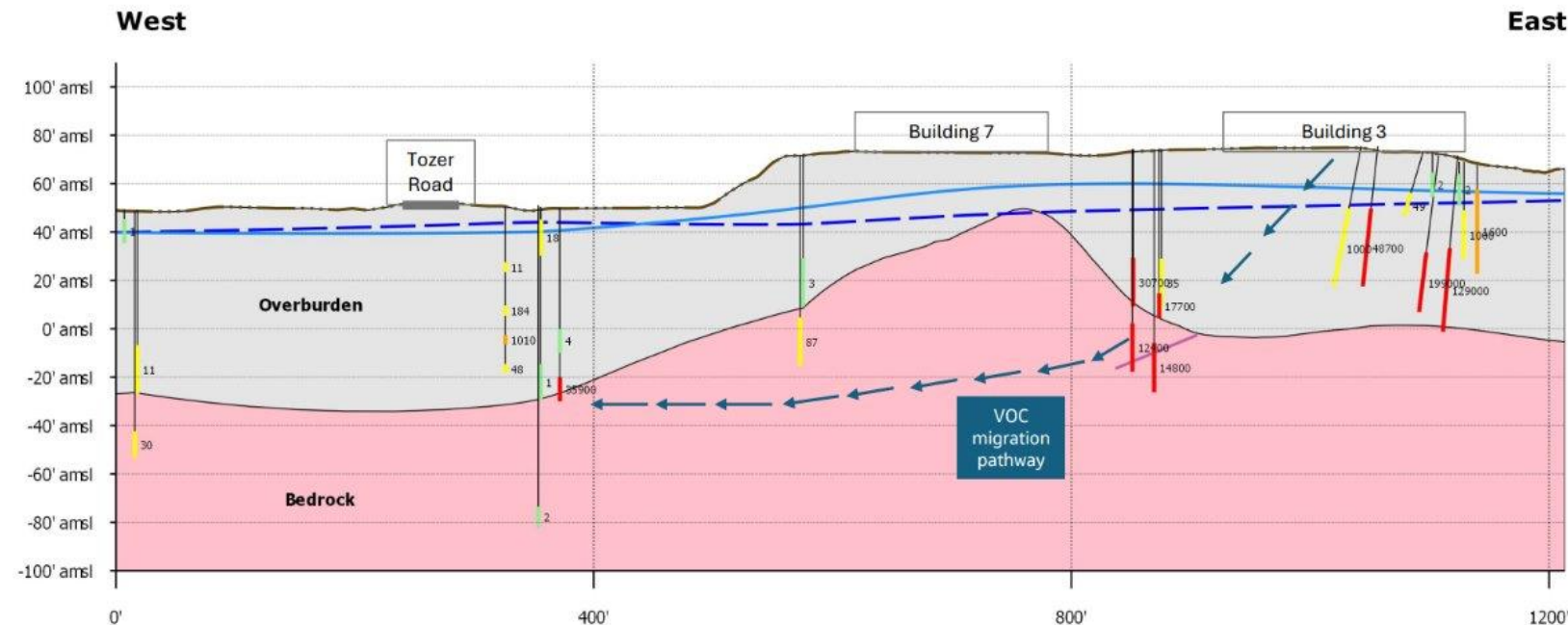
Staging of thermal treatment
equipment on site

Bedrock

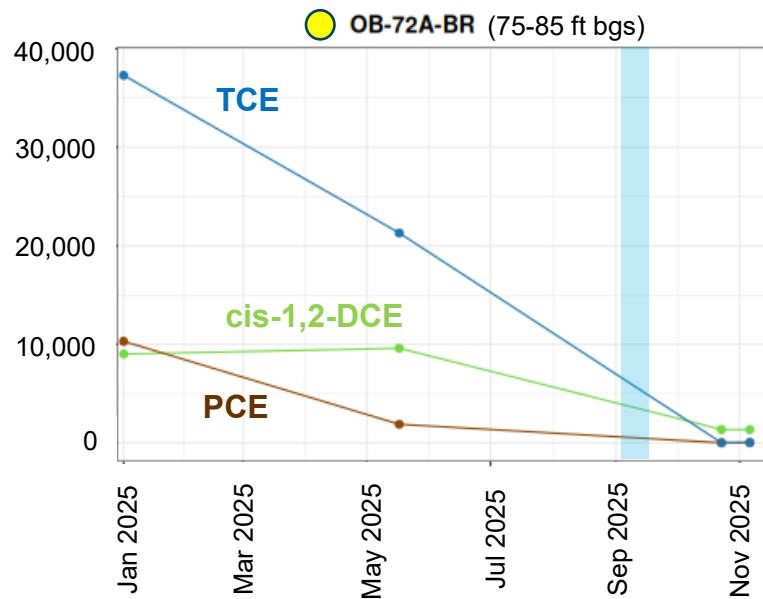
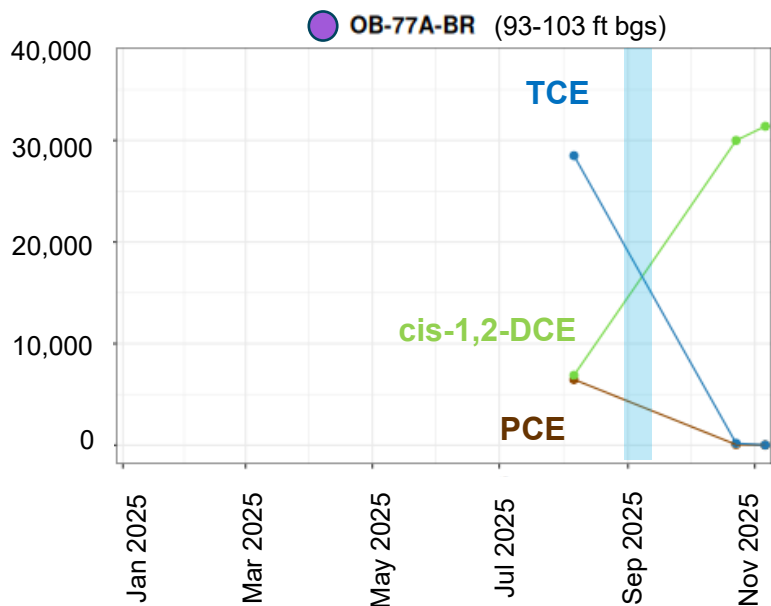
❖ In situ chemical reduction (ISCR)

- Injecting amendments to degrade VOCs in bedrock fractures
 - Cut off VOCs that may migrate from source areas during remedial activities
 - Reduce downgradient VOC concentrations moving back into the overburden
- Stage 1 – September 2025 (near Building 3) – 3 locations
- Stage 2 – January 2026 (near Building 5) – 2 locations

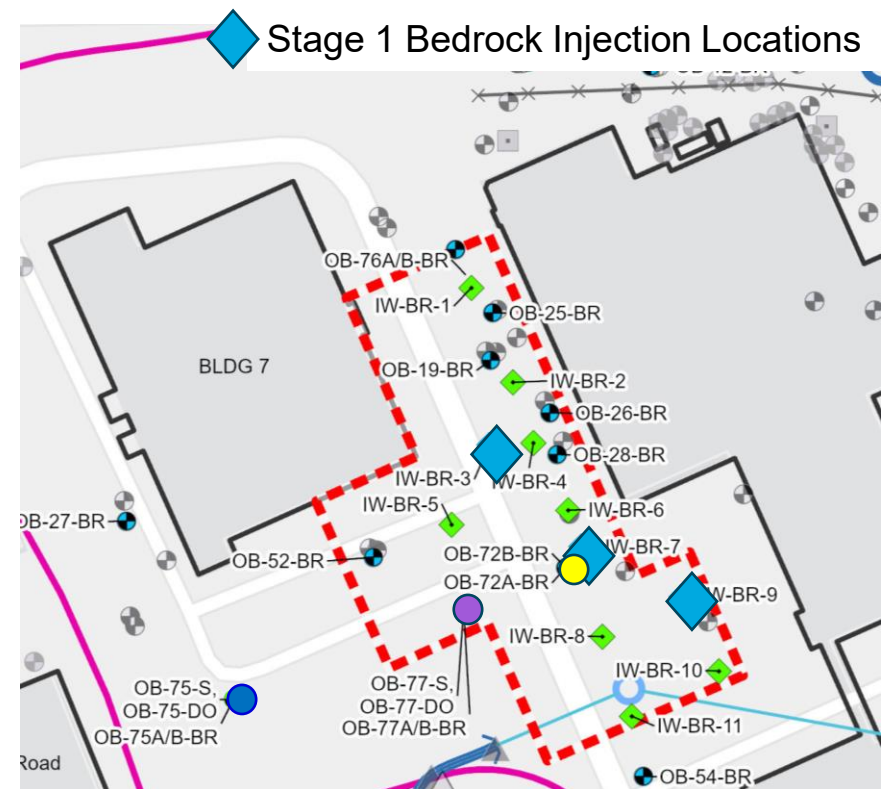
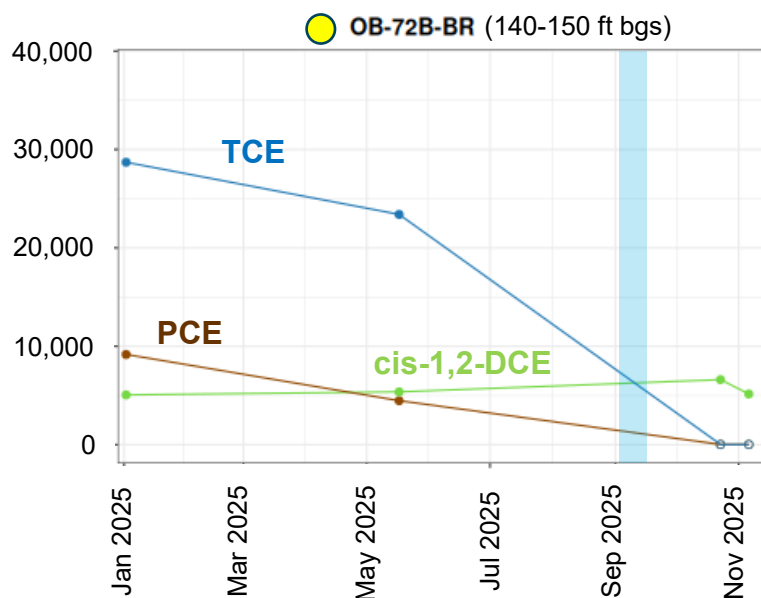
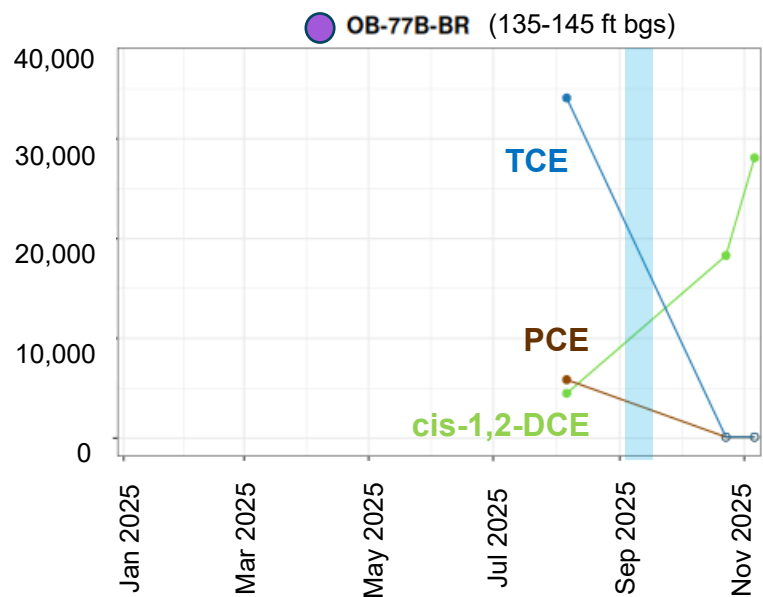
OB-77A/B-BR fracture zone (141-144 ft below grade)



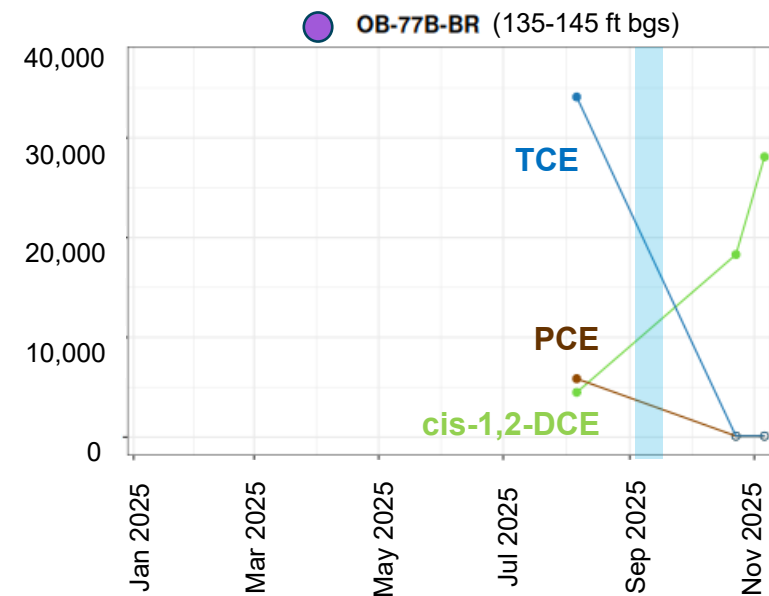
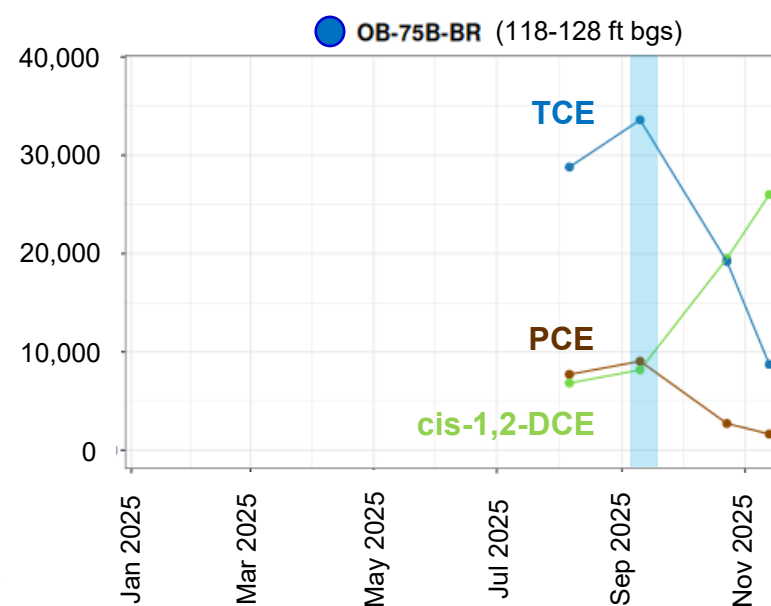
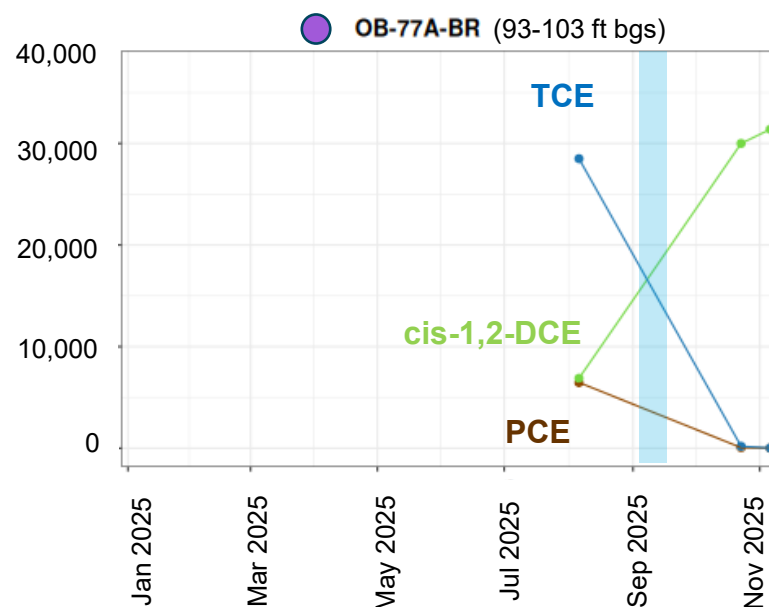
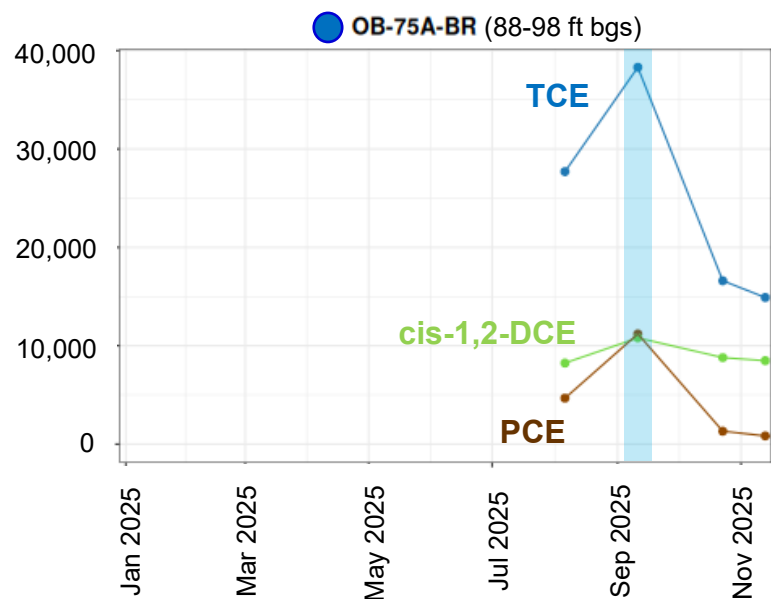
Bedrock Injection – Stage 1 Results (concentrations in $\mu\text{g/L}$)



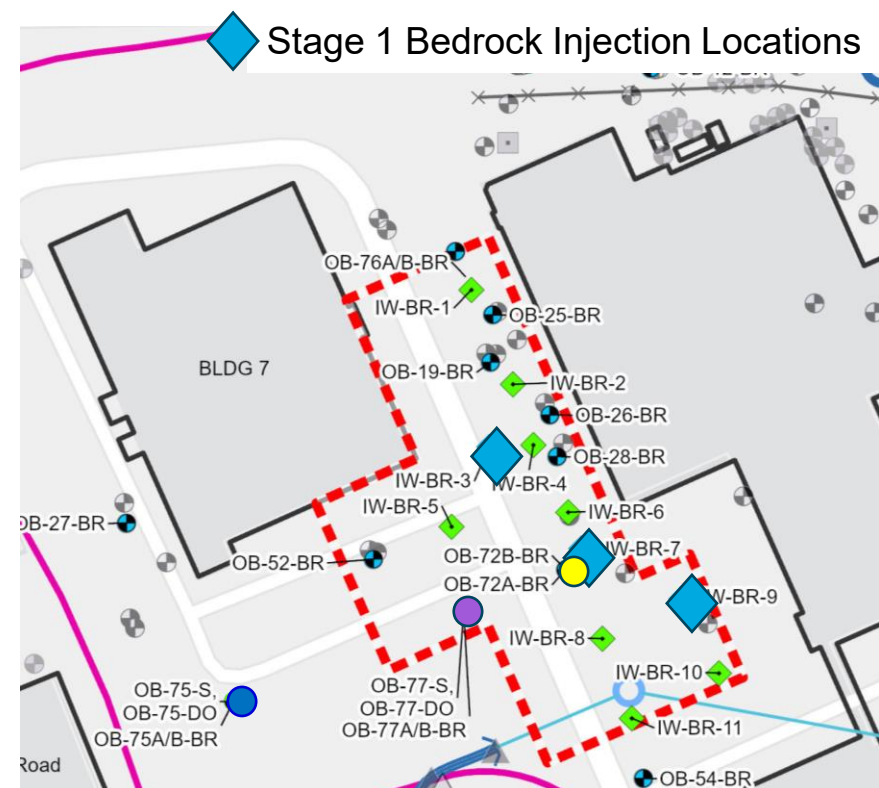
Stage 1 Injection Event (Sept 4-18, 2025)



Bedrock Injection – Stage 1 Results (concentrations in $\mu\text{g/L}$)



Stage 1 Injection Event (Sept 4-18, 2025)



Bedrock – Next Steps



- Stage 1 performance monitoring (Feb, May, Aug, Nov)
- Stage 2 performance monitoring (Feb, March, April, Aug, Nov)
- Construction of Stage 2 injection wells
- Stage 3 anticipated in Spring/Summer 2026

Building 3 Source Area

- ❖ In situ thermal treatment
- ❖ In situ bioremediation polish
- ❖ Continued soil vapor extraction (SVE)

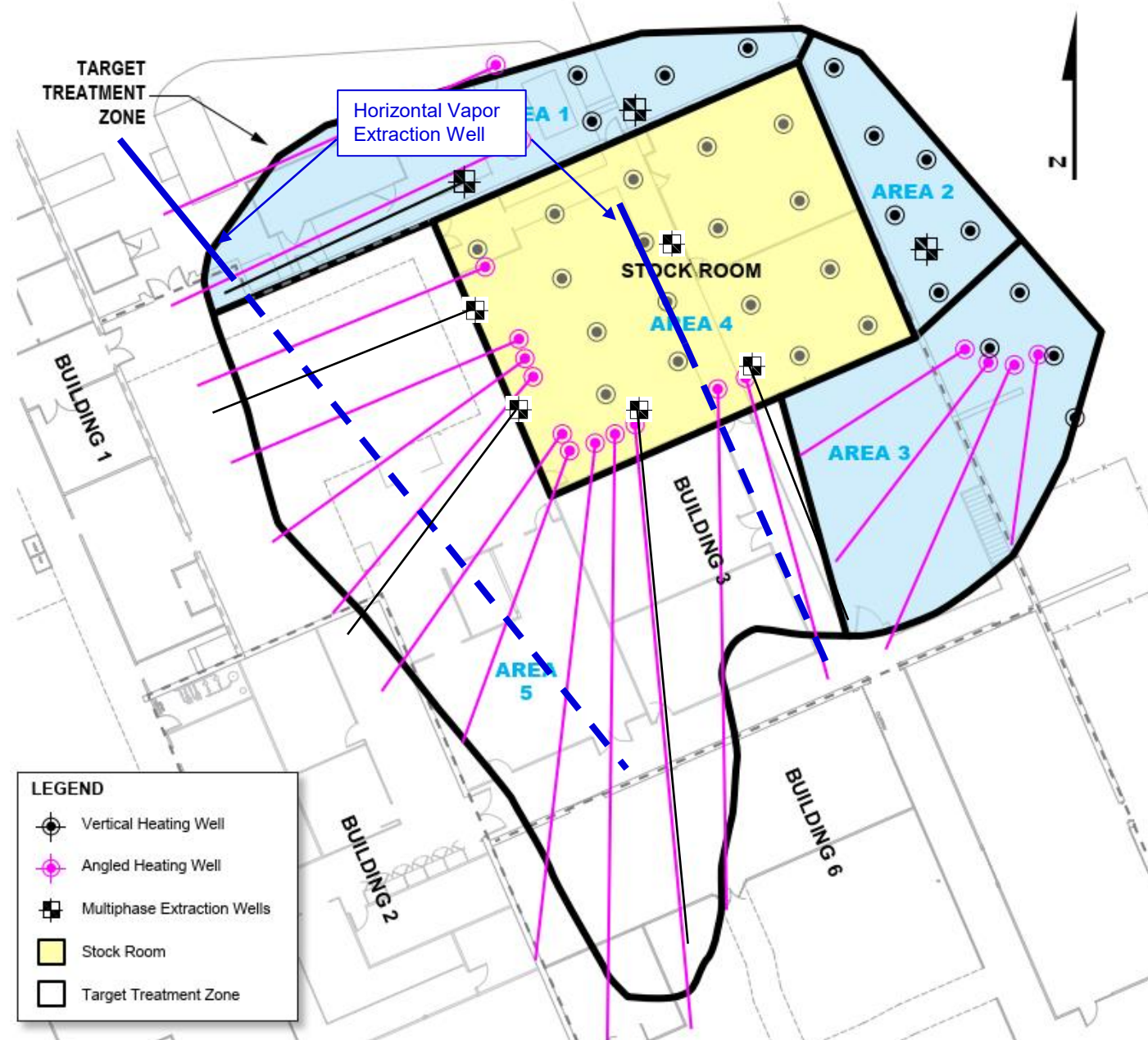
- Thermal treatment system construction continues
 - Stockroom drilling in progress (nightshifts)
 - Two horizontal vapor extraction wells installed earlier in January (day shift)
- Drilling observations remain consistent with conceptual model of VOC distribution underground
- 8,600 feet drilled (86% completion) as of January 12, 2026



Stockroom drilling

Building 3 Treatment

- Subsurface heating mobilizes VOCs from soil and water
- Vapor extraction captures steam and VOCs
 - Recovery wells co-located with select heaters
 - Horizontal wells installed a few feet below the building floor
- Groundwater extraction
 - Provides hydraulic containment
 - Supplements VOC extraction
- Extracted VOC containing water and vapor treated at surface



Building 3 Treatment

Equipment delivery



System power supply



Shop verification testing



- Mobilization of treatment system equipment to the site is underway
- Shop fabrication of liners, heaters, and remaining equipment is ongoing
- Next Steps
 - Complete drilling
 - Install liners, heaters, and power conductors
 - Install vapor and liquid extraction system piping
 - Install groundwater and vapor treatment equipment
 - Verify equipment operation
 - System startup

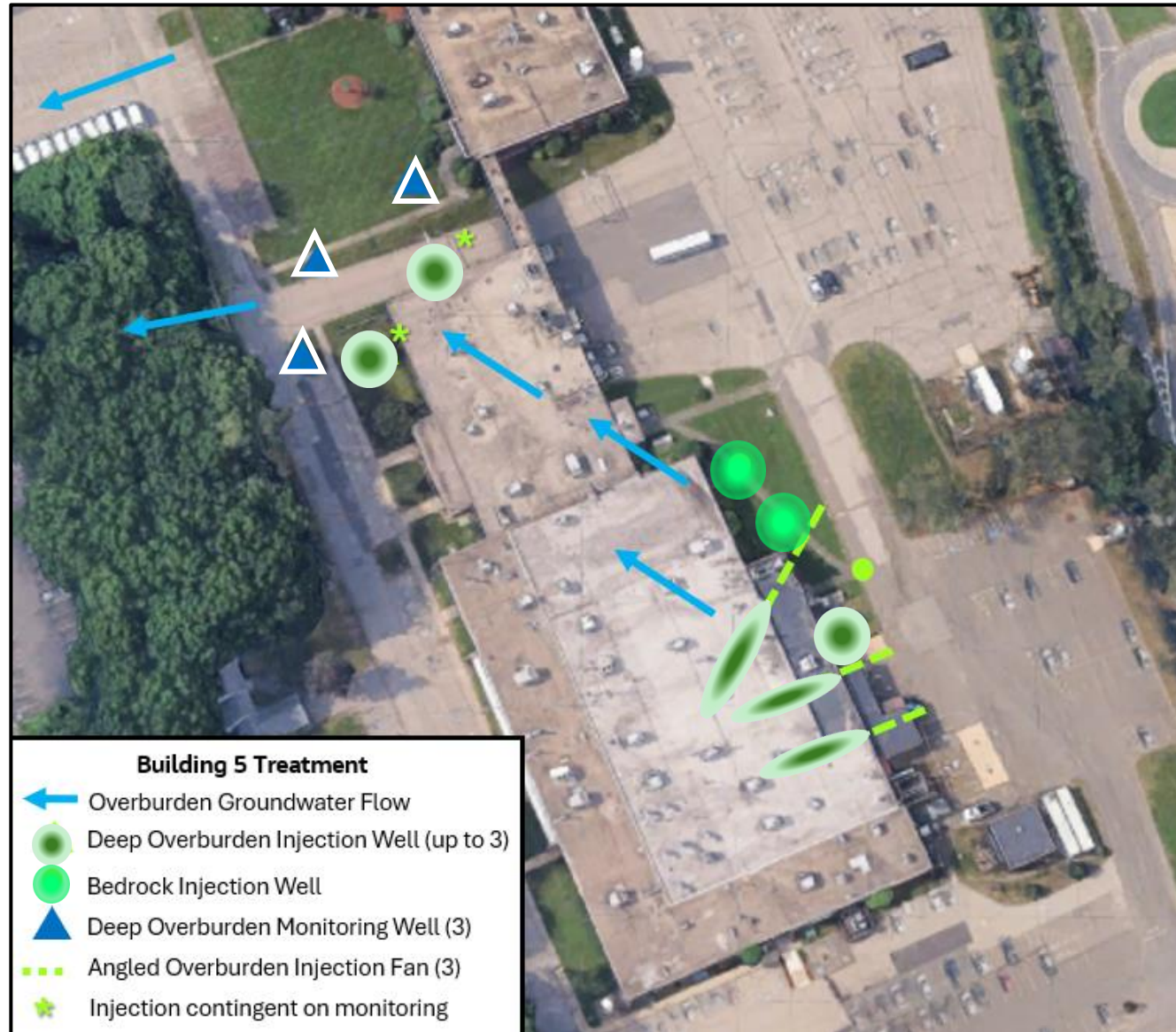
Building 5

- ❖ In situ bioremediation
- ❖ Continued soil vapor extraction

- Treatment well drilling and installation started last week
- Based on test data collected during drilling, treatment intervals will be selected
- Pneumatic injection of sand will take place to enhance permeability, plus zero-valent iron (ZVI) and emulsified vegetable oil (EVO) for treatment
- After deep treatment, additional treatment will be conducted in shallow areas, as needed



Building 5 Treatment Plan



- Drilling of treatment wells started
- Next Steps
 - Conduct drilling and treatment at each location
 - Drilling and injection is expected to take about four months to complete
 - Post-treatment monitoring will begin after the deep injections have been completed

PSL-10 – Overview

❖ Subgrade biogeochemical reactor (SBGR)



- SBGR continues to operate
 - The system is pumping less water than previously estimated, but still providing treatment of groundwater
- Sampling was completed in September and November 2025
 - Results continue to indicate lower PCE and TCE concentrations next to the cell
 - VOC monitoring will continue to confirm anticipated decreases downgradient
 - Data will be in February 2026 status report

System Installation Schedule*

Treatment Area	System Design	System Installation	Start of Treatment	Monitoring
Building 3 (Thermal)	Complete	In Progress	Spring 2026	2026
PSL-10 (SBGR)	Complete	Complete	Complete	Ongoing
Building 5 (Bio)	Complete	In Progress	February 2026	2026
Bedrock (ISCR)	Complete	Stage 1 Complete Stage 2 Complete Stage 3 Summer 2026	Stage 1 Complete Stage 2 Complete Stage 3 Summer 2026	Ongoing
Stream A (Mat)	Complete	Complete	Complete	Ongoing

NOTES:

* = Estimated schedule, subject to change

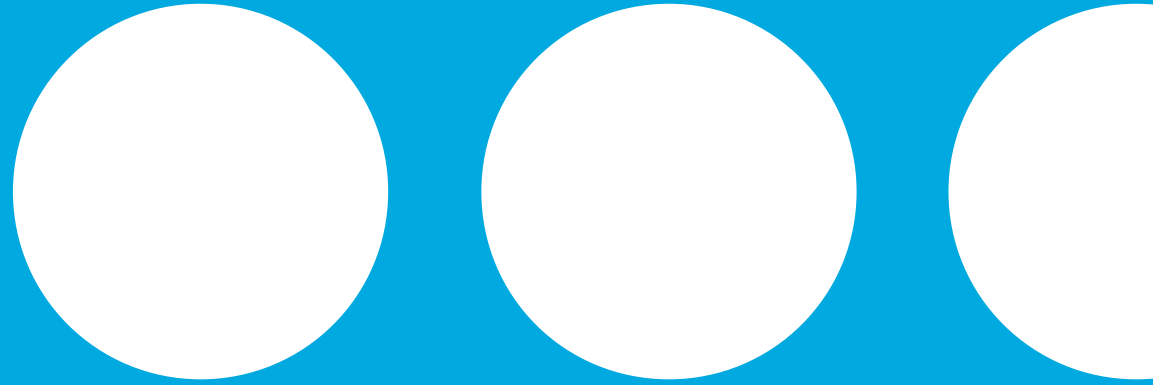
Bio = Bioremediation

ISCR = In situ chemical reduction

Mat = Reactive core mats

SBGR = Subgrade Biogeochemical Reactor

Upcoming Submittals and Public Involvement



Upcoming Submittals and Public Involvement Opportunities

Next Deliverables

- Phase IV/Temporary Solution Status Report (Feb 2026) – semiannual status report

Upcoming Meetings

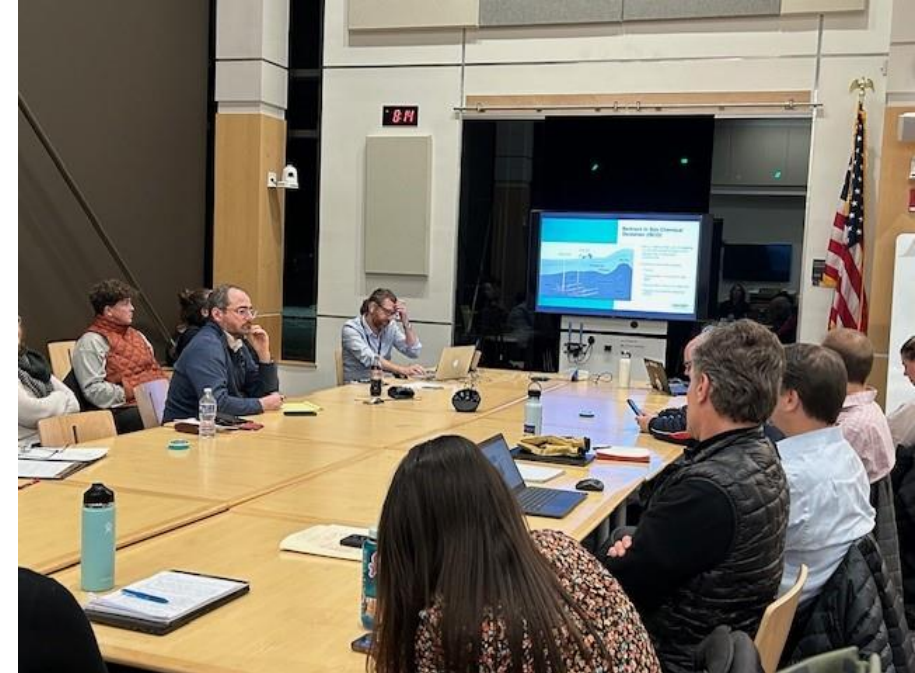
- Quarterly – alternating PIP and TAG meetings
 - Spring PIP (Apr or May 2026)
 - Summer TAG (July or Aug 2026)

Monthly Updates

- Sign the mailing list with your email address if you would like to receive updates by email only (no more paper mail)
- Website homepage updated first week of the month



[Sign-up Link](#)



Reports Available

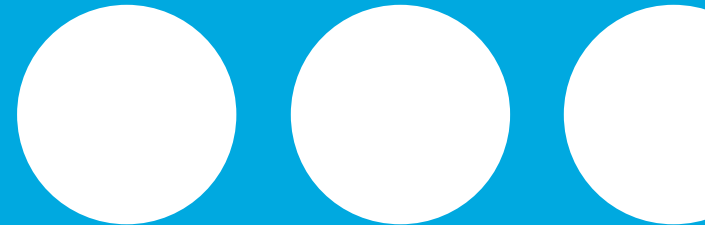
➤ Prior reports available here:

- Hard copy
Beverly Public Library Reference Desk
- Or online
<https://eeaonline.eea.state.ma.us/portal/dep/wastesite/viewer/3-0000485>

For More Information

- Website: <https://beverlysitecleanup.com/>
 - Homepage updated monthly
 - Public meeting videos
 - Presentation slides
 - Overview of environmental investigation and treatment to date
 - Links to MassDEP and EPA fact sheets on cleanup process and technologies
 - Forms to submit comments or sign up for emailed site mailing list
- Email: beverlysitecleanup@jacobs.com

Questions



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