



Community Advisory Council Environmental Update

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March 13, 2025



Agenda

- Building 197 Demolition and Mercury Remediation
- Tritiated Cooling Water Systems Status/Improvement Efforts
- Routine Sampling of Private Wells
- Building 96 Optimization Update
- Community Involvement Plan (CIP)



Building 197 High Bay Demo and Mercury Remediation Project

Project Scope:

Demolition of the wood frame building, soil excavation and disposal of remaining mercury contamination.

Benefits:

Eliminate deferred maintenance and repair needs, reduce environmental, safety and health risks

Project Status:

- Work Commenced on January 16, 2025, with the staging of equipment and dumpsters to support the building removal.
- Community Air Monitoring Plan (CAMP) is being implemented and is monitoring in real time for dust and mercury.
- The building structure has been removed, sampled, and disposed of off-site.
- The wood floor and support system for the building has been removed, size reduced, sampled, and is in the process of being disposed of.
- Building interior foundation piers have been removed and set aside for sampling.
- An interior concrete box was removed and contained elemental mercury which was visually observed.
- The project's contingency plan for elemental mercury was implemented and a contractor (Veolia) has responded to the site to help remove the elemental mercury.





**Initial demolition started on 1/16/25
on the south side of the high bay**



Demolition of superstructure continues



Demolition progressing of the overall structure. CAMP monitoring is shown on the left side of the picture (in the snow) just to the left of the orange fence



Demolition progress of the building 2/13/25. The wood deck is cleared off and the outside wall on the foundation was removed



Wood floor removal in process



Sampling of wood floor for waste characterization purposes



CAMP Monitoring Station (Dust & Mercury)



Concrete structure containing elemental mercury in a secondary containment pad

Tritiated Cooling Water Systems Status/Improvement Efforts

Reducing Environmental Risk and Improved Communications

Completed Actions

- Draining of Main Magnet system. Tritium concentration is now below drinking water standard
- Follow-up discussions with regulators resulted in the following criteria being established for the timely notification of such events that may not otherwise meet statutory reporting requirements but be of regulatory and/or public interest:

To Be Completed/Continued Actions

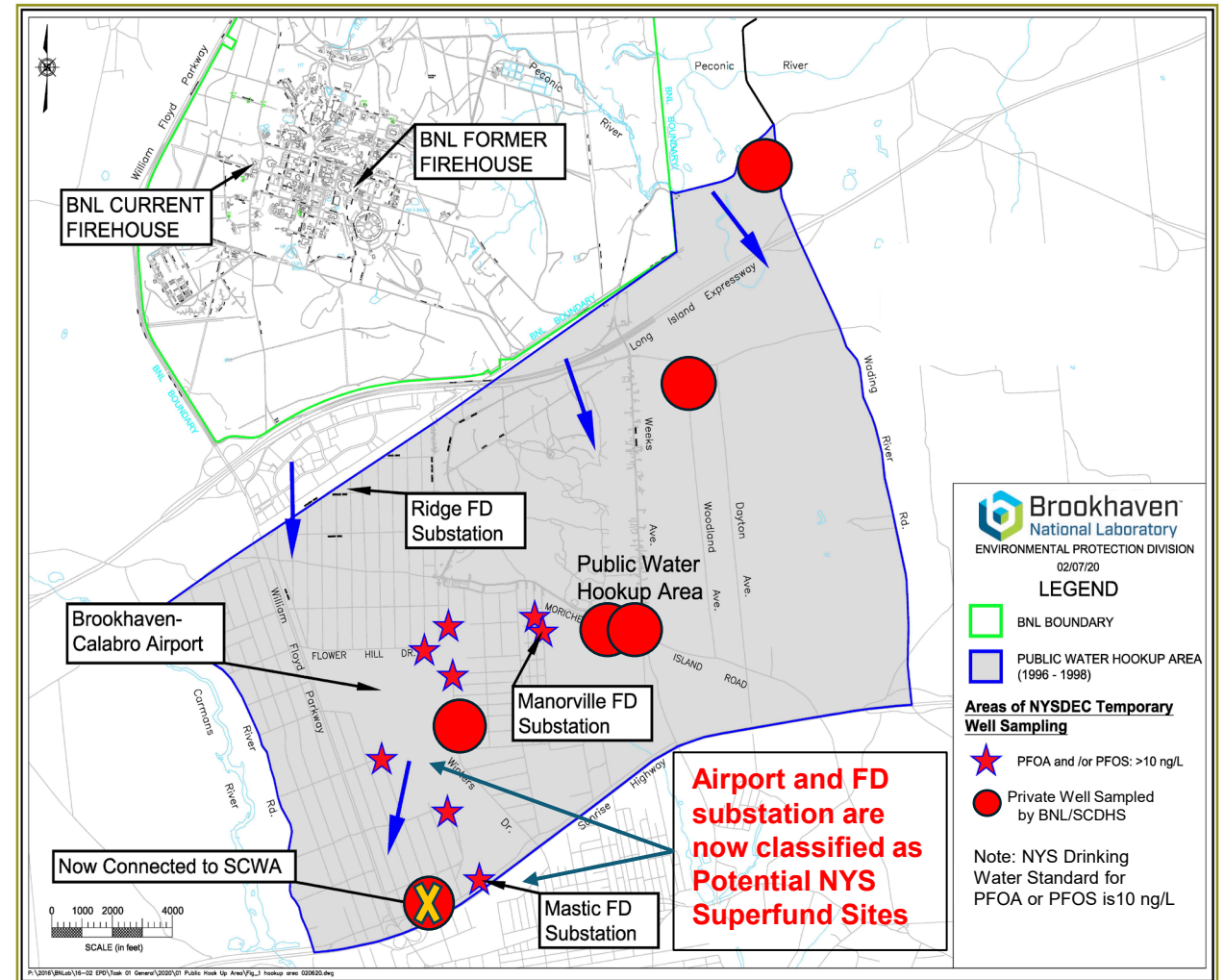
- Risk Assessment of potential leak scenarios
- Reevaluating/improving containment of highest risk systems
- Continued twice-daily visual inspections
- Continue engagement with stakeholders and community

“BNL will notify regulatory personnel if a leak of tritiated water to the outside environment (air, water, soil, exterior to a structure) is discovered and is above the tritiated water DWS of 20,000 pCi/L.”

Routine Sampling of Private Wells

NYSDEC requested that DOE provide an Alternate Water Supply for One Residence

- 1996-1998: DOE funded the connection of ~1,500 properties to public water (Suffolk County Water Authority)
- In 2004, seven property owners within the hookup area who declined to be connected to public water were offered free annual testing:
 - Samples collected by SCDHS
 - Samples analyzed by SCDHS for typical groundwater contaminants, but not for PFAS or 1,4-dioxane
 - BNL reimburses SCDHS for the analyses
- Currently, the program samples five private wells located at four properties
 - Three of the original properties were connected to public water





Building 96 Optimization Update

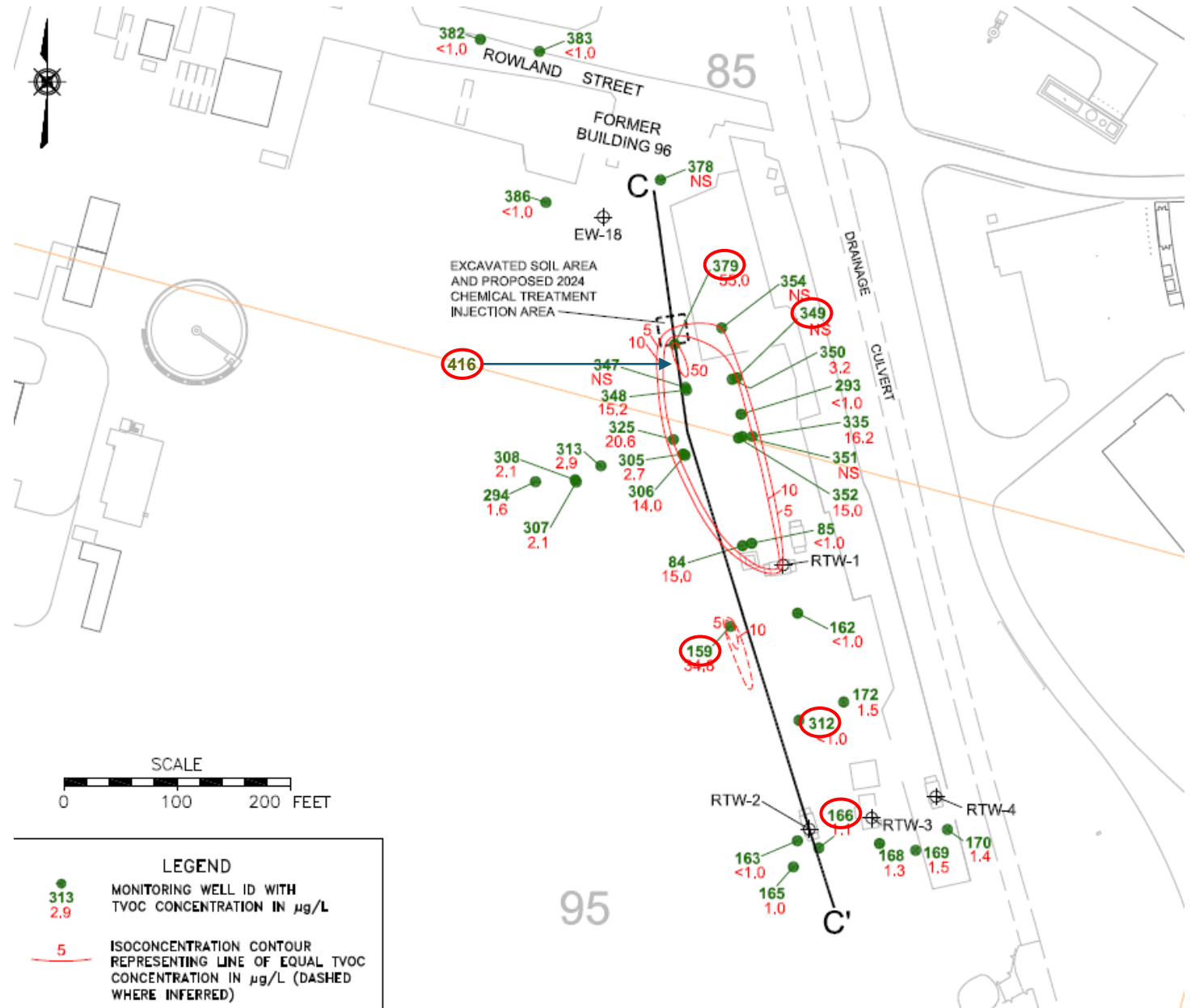
Concentrations of PCE
Pre- and Post Injections

Well ID	Pre- Injection	Post- Injection
085-379	88	ND
085-349	1.2	45
085-416	18	11
095-159	35	97, ND, 55
095-166	0.6	21
095-312	0.9	15

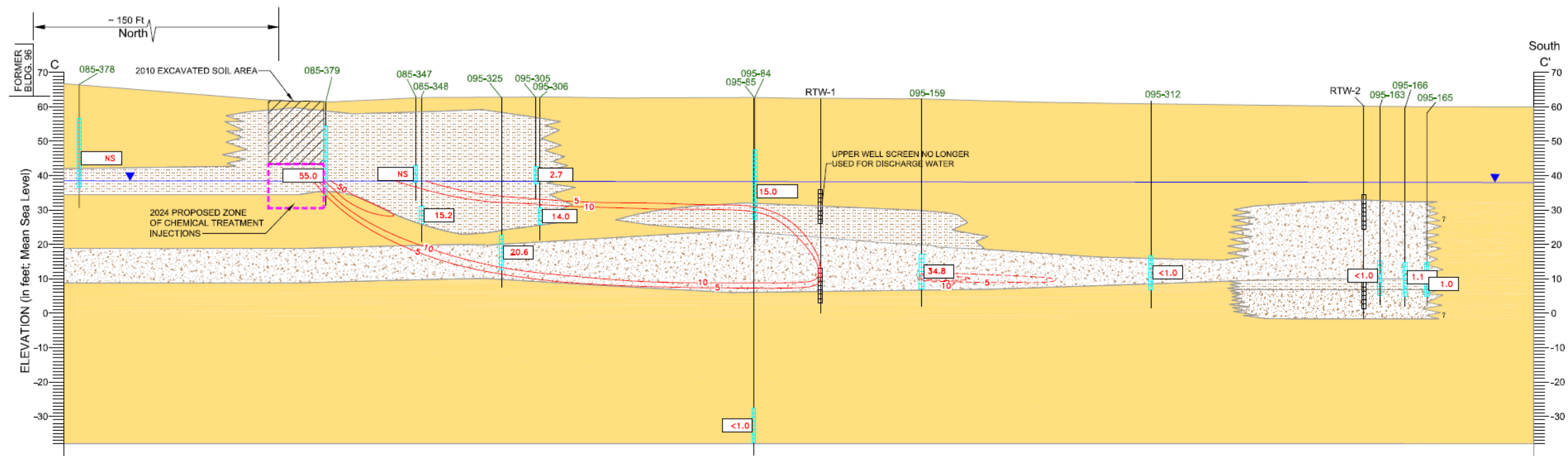
PCE – Perchloroethylene

Concentrations are in micrograms per liter ($\mu\text{g/L}$)

ND – Not detectable



Building 96 Optimization Update



BNL Community Involvement Plan

- Replaces BNL's 1991 "Community Relations Plan"
- The community involvement element of the Superfund program is important to keep the public informed, provide a mechanism to have their comments and concerns heard, and to participate in the decision-making process. **Goals:**
 - Actively seek and consider input regarding clean-up decisions that affect the community
 - Inform the public in a timely manner of key upcoming decisions
 - Provide opportunities for the public to have input in an open, two-way exchange of information
 - Take into consideration the views of regulators, elected officials, and stakeholders in making decisions
 - Provide reasonable access to relevant reports, records, and documents
 - Seek to provide non-technical explanations when requested by the community and the public

