

CERCLA Site-Wide Five Year Review/North Street East EDB Treatment System Update

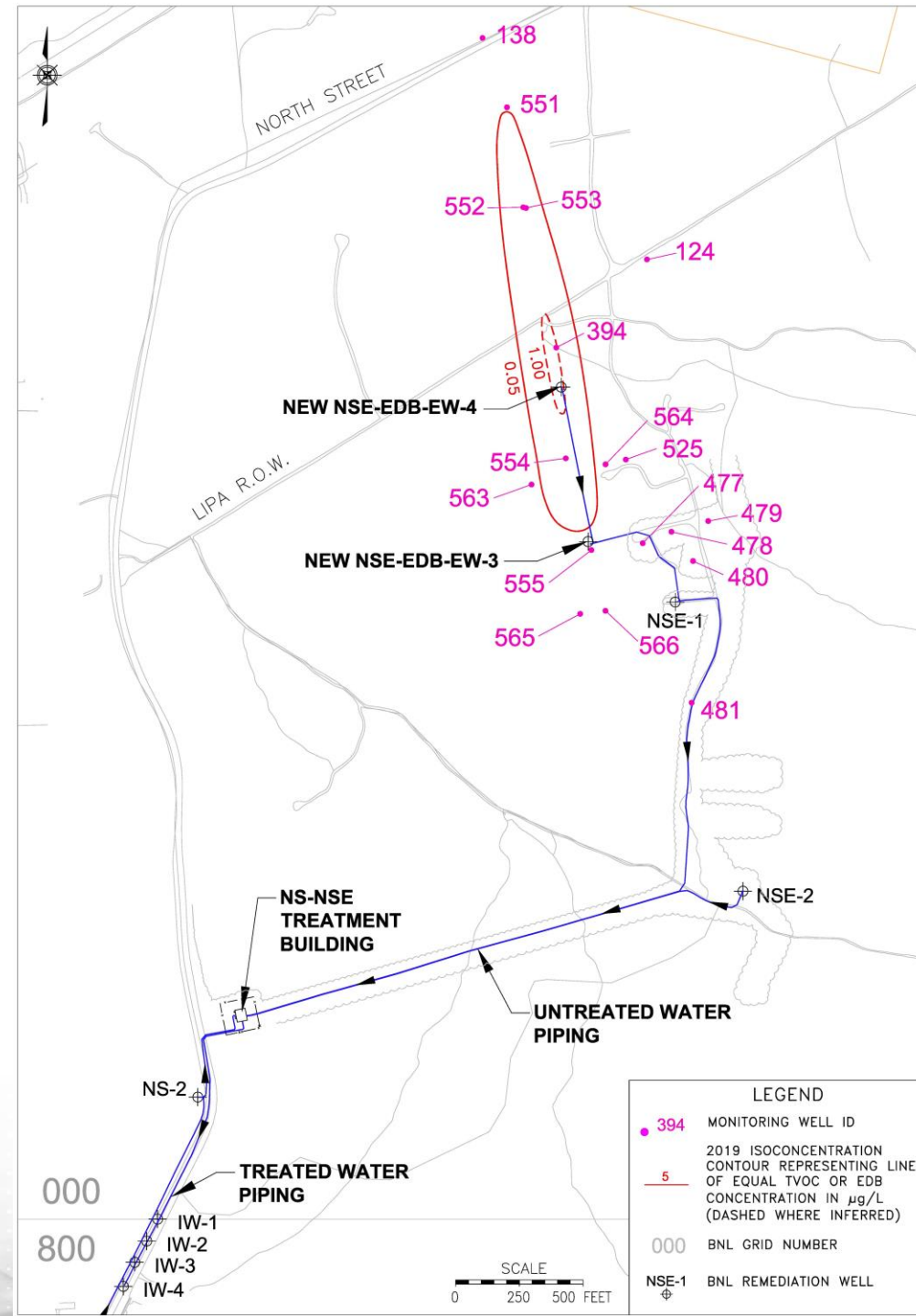
Brookhaven National Laboratory
Community Advisory Council
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Environmental Protection Division



Groundwater Treatment Status - North Street East EDB

- VOC system operated from 2004 – 2014
- Since last update 10/19 installed two new extraction wells to address ethylene dibromide (EDB), largely completed piping, electric and communications
- Project was on hold beginning 3/20 due to BNL Min-safe status
- Remaining work includes:
 - Completing several miscellaneous construction items including turning on pumps, reprogramming/updating controls, equipment testing (~ one week)
 - Startup testing of system (30 days)
 - Updating as-built drawings, operations and maintenance manual
- System operation should begin by late July 2020



CERCLA Five-Year Review Process

- Five-year reviews are required by EPA and NYSDEC under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process as long as contaminants remain on the site
- Intent is to evaluate the implementation and performance of cleanup remedies and whether they continue to remain protective of human health and environment
- Previous site-wide reviews issued 2006, 2011, and 2016
- 2016 Report <https://www.bnl.gov/gpg/5year-review.php>
- Addendum issued February 2017 to address regulator comments (no changes to the June 2016 document)

CERCLA Five-Year Review Process

Issues identified in the 2016 review to be addressed included:

- OU I Former Hazardous Waste Management Facility Sr-90 groundwater plume
- Radiological soil contamination in vicinity of former Waste Concentration Facility Buildings 810/811
- OU III Western South Boundary deep VOC contamination
- OU III Building 96 source removal effectiveness
- Continuing Sr-90 source at BGRR



CERCLA Five-Year Review Process

Short Video: Getting to Know the Five-Year Review, A Guide for Communities Near Federal Facilities

<https://www.youtube.com/watch?v=VguoeVT4Fjl>

2021 CERCLA Five-Year Review

- The fourth Site-wide Review will evaluate all cleanup remedies for groundwater, soil, Peconic River sediment, BGRR, HFBR, and g-2 tritium plume, BLIP, and Underground Storage Tanks
- Protectiveness assessment includes three questions
 - Is the remedy functioning as intended by the decision documents?
 - Is it working?
 - Opportunities for optimization, new technologies?
 - Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives used at the time of the remedy selection still valid?
 - Have standards changed?
 - Has any other information come to light that could call into question the protectiveness of the remedy?
 - Has there been a land use change, new ecological risk?
- We rely on annual Groundwater Status and Site Environmental Reports, and institutional control evaluations as a basis for the Review

2021 CERCLA Five-Year Review

- Areas of particular focus:
 - Western South Boundary and North Street East Groundwater Treatment System Modifications
 - Emerging contaminants (PFAS/1,4-Dioxane)
 - Former Hazardous Waste Management Facility Sr-90 plume attenuation
 - Sr-90 continuing sources at BGRR and former Waste Concentration Facility
- Next steps
 - Input from CAC (tonight)
 - Perform interviews (complete) and site inspections
 - Technical assessment for each remedy, and recommendations
 - Regulator review
 - CAC/BER update
 - Public availability

2021 CERCLA Five-Year Review

- Schedule
 - Data review and prepare report – Spring/Summer 2020
 - DOE review – Late 2020
 - Draft report to regulators and CAC update - Spring 2021
 - Public Availability – Summer 2021



2021 CERCLA Five-Year Review

- Questions for CAC input:
 - What is your overall impression of BNL's cleanup and do you feel well informed about the cleanup activities and progress?
 - Are there any specific aspects of the cleanup that you feel should be of particular focus during the review? (e.g. Records of Decision, cleanup goals, community input, etc.)
 - Do you feel confident in BNL and DOE's management of the long-term cleanup operations for the site?
 - Do you have any comments, suggestions, or recommendations regarding BNL/DOE's management and communications of the cleanup?