



**450 UNION STREET
 NAPL GAUGING AND RECOVERY
 MONTHLY REPORT JUNE 2024**

BCP Site No. C224219

This report serves to document Dense Non-Aqueous Phase Liquid (DNAPL) gauging and recovery performed by GZA GeoEnvironmental, Inc. (GZA), on behalf of National Grid, at the 450 Union Street property in Brooklyn, New York (Site). Consistent with the October 2020 Remedial Action Work Plan (RAWP) prepared by Langan on behalf of 450 Union LLC and 450 Union Developer LLC, DNAPL gauging, and recovery was performed at two wells (RW-01 and RW-02) which are located on the eastern portion of the Site.

Summary of Field Activities:

- On June 25, 2024, GZA performed DNAPL gauging and recovery at RW-01 and RW-02. The table below provides a summary of this event, and the attached **Table 1** summarizes gauging and recovery data collected by GZA to date.

Pre-Recovery						Post Recovery	
Well ID	Date	Depth to Water (ft)	Depth to NAPL (ft)	DNAPL Thickness (ft)	DNAPL Volume Removed (gal)	Depth to NAPL (ft)	DNAPL Thickness (ft)
RW-01	6/25/24	9.59	39.30	9.60	30	Trace	Trace
RW-02	6/25/24	10.00	55.65	2.70	40	Trace	Trace

- The area around each well was covered with polyethylene sheeting prior to performance of gauging and recovery activities.
- Approximately 70 gallons of DNAPL/water mixture were recovered from RW-01 and RW-02 during the June 25, 2024, recovery event with a submersible pump and the Pulse Pump® Model LP1301.
- The recovered DNAPL/water and polyethylene sheeting/PPE were containerized in 55-gallon drums. Prior to leaving the Site, these drums were transported off-Site for disposal by Miller Environmental Group at the AB Environmental, facility in Bohemia, New York (PPE) and Tradabe facility in Meriden Connecticut (DNAPL). A copy of the disposal manifests are attached.

Attachments: Table 1: Summary of NAPL Gauging and Recovery Activities

Attachment A: Disposal Manifest



July 2024
450 Union Street
Brooklyn, New York
File No. 03.0034060.10

Certification

I, James J. Clark, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this field report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

James J. Clark, P.E., LEP
Qualified Environmental Professional

7/10/2024
Date


Signature



July 2024
450 Union Street
Brooklyn, New York
File No. 03.0034060.10

TABLE 1
SUMMARY OF NAPL GAUGING ACTIVITIES

TABLE 1
Summary of NAPL Gauging and Recovery Activities
450 Union Street
Brooklyn, NY

Location	Prior to DNAPL Recovery			Post DNAPL Recovery			Volume of DNAPL Removed	Cumulative Volume of DNAPL Removed	Comments	
	Date	Depth to DNAPL (ft.)	DNAPL Thickness (ft)	Date/Time	Depth to DNAPL (ft.)	DNAPL Thickness (ft)	(gallons)	(gallons)		
RW-01 Total well depth = 48.90 ft.	4/19/2022	38.2	10.7	4/19/22 8:30	Trace	Trace	14	14	Flooding observed prior to DNAPL recovery	
	5/20/2022	40	8.90	5/20/22 8:55	Trace	Trace	20	34	Some flooding observed prior to DNAPL recovery	
	6/21/2022	39.17	9.73	6/21/2022	Trace	Trace	40	74	No flooding observed	
	7/28/2022	39.34	9.56	7/28/2022	Trace	Trace	16	90	Flooding observed prior to DNAPL recovery	
	8/30/2022	39.15	9.75	8/30/2022	Trace	Trace	20	110	No flooding observed	
	9/28/2022	39.19	9.71	9/28/2022	Trace	Trace	15	125	No flooding observed	
	10/26/2022	38.65	10.25	10/26/2022	Trace	Trace	35	160	Some flooding observed prior to DNAPL recovery	
	11/29/2022	45.30	3.6	11/29/2022	Trace	Trace	20	180	No flooding observed	
	12/28/2022	39.51	9.39	12/28/2022	Trace	Trace	35	215	No flooding observed	
	1/31/2023	39.10	9.8	1/31/2023	Trace	Trace	25	240	Flooding observed prior to DNAPL recovery	
	2/21/2023	39.05	9.85	2/21/2023	Trace	Trace	27	267	Flooding observed prior to DNAPL recovery	
	3/28/2023	38.45	10.45	3/28/2023	Trace	Trace	50	317	No flooding observed	
	4/1/2023								Site Inaccessible due to demolition	
	5/1/2023								Site Inaccessible due to demolition	
	6/8/2023	38.60	10.3	3/28/2023	Trace	Trace	40	357	No flooding observed	
	7/6/2023	39.45	9.45	7/6/2023	Trace	Trace	40	397	No flooding observed	
	8/15/2023	38.85	10.05	8/15/2023	Trace	Trace	20	417	Flooding observed prior to DNAPL recovery	
	9/19/2023	43.80	5.1	9/19/2023	Trace	Trace	25	442	Flooding observed prior to DNAPL recovery	
	10/17/2023	45.35	3.55	10/17/2023	Trace	Trace	30	472	No flooding observed	
	11/21/2023	45.05	3.85	11/21/2023	Trace	Trace	40	512	No flooding observed	
	12/27/2023	45.00	3.9	12/27/2023	Trace	Trace	15	527	No flooding observed	
	1/30/2024	41.20	7.7	1/30/2024	Trace	Trace	35	562	No flooding observed	
	2/27/2024	40.50	8.4	2/28/2024	Trace	Trace	15	577	No flooding observed	
3/7/2024	48.50	0.4	3/7/2024	0.4	0.4	0	577	No flooding observed		
4/25/2024	39.20	9.7	4/25/2024	Trace	Trace	20	597	No flooding observed		
5/29/2024	39.40	9.5	5/29/2024	Trace	Trace	40	637	No flooding observed		
6/25/2024	39.30	9.6	6/25/2024	Trace	Trace	30	667	No flooding observed		

TABLE 1
Summary of NAPL Gauging and Recovery Activities
450 Union Street
Brooklyn, NY

Location	Prior to DNAPL Recovery			Recovery after Removal			Volume of DNAPL Removed (gallons)	Cumulative Volume of DNAPL Removed (gallons)	Total Cumulative Volume of DNAPL Removed (gallons)	Comments
	Date	Depth to DNAPL (ft.)	DNAPL Thickness (ft.)	Date/Time	Depth to DNAPL (ft.)	DNAPL Thickness (ft.)				
RW-02 Total well depth = 58.35 ft.	4/19/2022	39.00	19.35	4/19/22 10:30	42.0	16.35	31	31	45	Well cap damaged - needs to be replaced
	5/20/2022	39.75	18.60	5/20/22 11:00	50.41	10.66	68	99	133	Well cap damaged - needs to be replaced
	6/21/2022	43.17	15.18	6/21/2022	Trace	Trace	80	179	253	Well cap replaced with a 6-inch J-Plug
	7/28/2022	51.75	6.60	7/28/2022	Trace	Trace	22	201	291	
	8/30/2022	49.9	8.45	8/30/2022	56.85	1.5	35	236	346	
	9/28/2022	46.82	11.53	9/28/2022	Trace	Trace	65	301	426	
	10/26/2022	47.20	11.15	10/26/2022	Trace	Trace	105	406	566	
	11/29/2022	49.20	9.15	11/29/2022	Trace	Trace	80	486	666	
	12/28/2022	50.53	7.82	12/28/2022	Trace	Trace	55	541	756	
	1/31/2023	52.60	5.75	1/31/2023	Trace	Trace	70	611	851	
	2/21/2023	52.67	5.68	2/21/2023	57.5	0.85	82	693	960	
	3/28/2023	52.53	5.82	3/28/2023	Trace	Trace	50	743	1060	
	Site Inaccessible due to demolition									
	Site Inaccessible due to demolition									
	6/8/2023	45.40	12.95	6/8/2023	56.5	1.85	140	883	1240	
	7/6/2023	48.25	10.10	7/6/2023	57	1.35	110	993	1390	
	8/15/2023	49.50	8.85	8/15/2023	Trace	Trace	130	1123	1540	
	9/19/2023	51.81	6.54	9/19/2023	Trace	Trace	110	1233	1675	
	10/17/2023	54.70	3.65	10/17/2023	Trace	Trace	40	1273	1745	
	11/21/2023	53.65	4.70	11/21/2023	Trace	Trace	50	1323	1835	
	12/27/2023	55.50	2.85	12/27/2023	Trace	Trace	10	1333	1860	
	1/30/2024	52.90	5.45	1/30/2024	Trace	Trace	50	1383	1945	
	2/28/2024	53.60	4.75	2/27/2024	53.6	4.75	0	1383	1960	No recovery due to equipment issue
	3/7/2024	53.35	5.00	3/7/2024	Trace	Trace	25	1408	1985	
	4/25/2024	54.70	3.65	4/25/2024	Trace	Trace	35	1443	2040	
	5/29/2024	54.12	4.23	5/29/2024	Trace	Trace	30	1473	2110	
6/25/2024	55.65	2.70	6/25/2024	Trace	Trace	40	1513	2180		



July 2024
450 Union Street
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ATTACHMENT A
DISPOSAL MANIFEST

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

**NATIONAL GRID
300 ERIE BOULEVARD
SYRACUSE, NY 13202**

**National Grid
450 Union St.
Brooklyn, NY 11231**

Generator's Phone: **3472138874**

U.S. EPA ID Number

6. Transporter 1 Company Name

NYD986908085

MILLER ENVIRONMENTAL GROUP, INC

U.S. EPA ID Number

7. Transporter 2 Company Name

8. Designated Facility Name and Site Address

*AB/miller Environmental
1599 Ocean Ave
Bohemia NY 11716
631-567-6545*

U.S. EPA ID Number

~~NYR000238349~~

NYD987023371

~~WATERWORKS
77 STEWART AVENUE
NEWBURGH, NY 12550~~

Facility's Phone: **845-581-4111**

9. Waste Shipping Name and Description

10. Containers

11. Total Quantity

12. Unit Wt./Vol.

No. Type

1. **Non RCRA Non DOT Regulated Solids (Oily Debris)**

1 DM 25 P

2.

3.

4.

13. Special Handling Instructions and Additional Information

Document # D46340 Job#: NY02240843 PO#:

- 1) Approval #:
- 2) Container Size: 55-gal drums
- 3) Truck #: 662

AS AGENT FOR NATGRID

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Officer's Printed/Typed Name

Signature

Month Day Year

KELVIN JESSUP

[Signature]

6 25 24

15. International Shipments

Import to U.S.

Export from U.S.

Port of entry/exit

Transporter Signature (for exports only):

Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Signature

Month Day Year

KELVIN JESSUP

[Signature]

6 25 24

Transporter 2 Printed/Typed Name

Signature

Month Day Year

David Surin

[Signature]

7 2 24

17. Discrepancy

17a. Discrepancy Indication Space

Quantity

Type

Residue

Partial Rejection

Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)

Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name

Signature

Month Day Year

Anthony L. Caligiuri Agent

[Signature]

7 2 24

GENERATOR

INT'L

TRANSPORTER

DESIGNATED FACILITY

5. Generator's Name and Mailing Address

NATIONAL GRID
175 East Old Country Road
Nicksville, NY 11891

NATIONAL GRID
450 UNION ST
BROOKLYN, NY 11231

Generator's Phone: 247-213-8974

U.S. EPA ID Number

6. Transporter 1 Company Name

MILLER ENVIRONMENTAL GROUP INC

NYD888908085

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

TRADEBE TREATMENT AND RECYCLING
130 GRACEY AVENUE
MERIDEN, CT 08451

U.S. EPA ID Number

CTD021816889

Facility's Phone: 203-238-6745

9. Waste Shipping Name and Description

10. Containers

11. Total Quantity

12. Unit Wt./Vol.

1. Non RCRA Non DOT Regulated Liquids (DNAPL)

No. Type
2 DM

70 GAL
160 P

13. Special Handling Instructions and Additional Information

Document# D46341 Job#: NY02240943 POW:

- 1) Approval #: 10000000000000000000
- 2) Container Size: 55-gal drums
- 3) Truck #: 2037049

AS AGENT FOR NAT GRID

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offoror's Printed/Typed Name

Signature

Month Day Year
6 25 24

15. International Shipments

Import to U.S.

Export from U.S.

Port of entry/exit:

Transporter Signature (for exports only):

Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Signature

Month Day Year
6 25 24

Transporter 2 Printed/Typed Name

Signature

Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space

Quantity

Type

Residue

Partial Rejection

Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)

Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a

Printed/Typed Name

Signature

Month Day Year
6 26 24

GENERATOR

INT'L

TRANSPORTER

DESIGNATED FACILITY



GZA GeoEnvironmental of New York