

Monthly Report No. 9

450 UNION STREET NAPL GAUGING AND RECOVERY MONTHLY REPORT – DECEMBER 2022

450 Union Street – NAPL Gauging and Recovery New York State Department of Environmental Conservation (NYSDEC) 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 December 28, 2022, 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.

		Р	re-Recovery			Post Reco	overy
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	12/28/22	11.17	39.51	9.39	35	Trace	Trace
RW-02	12/28/22	11.27	50.53	7.82	55	Trace	Trace

- The area around each well was covered with polyethylene sheeting prior to performance of gauging and recovery activities.
- Approximately 90 gallons of DNAPL/water mixture was recovered from the two wells during the December 28, 2022, 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 Waterworks, facility in Newburgh, New York (PPE), and Norlite facility in Cohoes, New York (DNAPL). A copy of the disposal manifests is attached.



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

Attachment A: Disposal Manifest

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 <u>2/13/2023</u> Date

lak

Signature



TABLE 1

SUMMARY OF NAPL GAUGING ACTIVITIES

TABLE 1Summary of NAPL Gauging and Recovery Activities450 Union StreetBrooklyn, NY

Location	Prior	to DNAPL Rec	overy	Post D	NAPL Recove	ry	Volume of DNAPL Removed	Cumulative Volume of DNAPL Removed	
	Date	Depth to DNAPL (ft.)	DNAPL Thickness (ft)	Date/Time	Depth to DNAPL (ft.)	DNAPL Thickness (ft)	(gallons)	(gallons)	Comments
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 oberved prior to DNAPL recovery
	5/20/2022	40	8.90	5/20/22 8:55	Trace	Trace	20	34	Some flooding oberved prior to DNAPL recovery
	6/21/2022	39.17	9.73	6/21/2022	Trace	Trace	40	74	No flooding oberved
	7/28/2022	39.34	9.56	7/28/2022	Trace	Trace	16	90	Flooding oberved prior to DNAPL recovery
	8/30/2022	39.15	9.75	8/30/2022	Trace	Trace	20	110	No flooding oberved
	9/28/2022	39.19	9.71	9/28/2022	Trace	Trace	15	125	No flooding oberved
	10/26/2022	38.65	10.25	10/26/2022	Trace	Trace	35	160	Some flooding oberved prior to DNAPL recovery
	11/29/2022	45.30	3.6	11/29/2022	Trace	Trace	20	180	No flooding oberved
	12/28/2022	39.51	9.39	12/28/2022	Trace	Trace	35	215	No flooding oberved

TABLE 1Summary of NAPL Gauging and Recovery Activities450 Union StreetBrooklyn, NY

Location	Prior to I	DNAPL Recov	very	Recover	y after Remov	al	Volume of DNAPL Removed	Cumulative Volume of DNAPL Removed	Total Cumulative Volume of DNAPL Removed	
	Date	Depth to DNAPL (ft.)	DNAPL Thickness (ft)	Date/Time	Depth to DNAPL (ft.)	DNAPL Thickness (ft)	(gallons)	(gallons)		Comments
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	88	133	Well cap damaged - needs to be replaced
	6/21/2022	43.17	15.18	6/21/2022	Trace	Trace	80	120	253	Well cap replaced wih a 6-inch J-Plug
	7/28/2022	51.75	6.60	7/28/2022	Trace	Trace	22	38	291	
	8/30/2022	49.9	8.45	8/30/2022	56.85	1.5	35	55	346	
	9/28/2022	46.82	11.53	9/28/2022	Trace	Trace	65	80	426	
	10/26/2022	47.20	11.15	10/26/2022	Trace	Trace	105	140	566	
	11/29/2022	49.20	9.15	11/29/2022	Trace	Trace	80	100	666	
	12/28/2022	50.53	7.82	12/28/2022	Trace	Trace	55	90	756	



ATTACHMENT A

DISPOSAL MANIFEST

	1731			2.2	1. Documen		2. Page 1
ĥ	And Antonio Provention	ILL OF LADING	N/A		Site Address	VET1141	of
		eror Name and Melling Address NATIONAL GRID 175 East Old Country Road Hicksville, NY 11801 eror Phone () 347-213-8674	र्भ सं म्या १ हे २ हे २ हे		NAT	TONAL GRID UNION ST DOKLYN, NY 11231	8 ⁻⁴ .4'
	5. Trai	Insporter 1 Company Name MILLER ENVIRONMENTAL GROUP, IN	6. EPA ID # NYD986908085		A. State Tran	and the second	
3 	Le accession	nsporter 2 Company Name	8. EPAID #		B. Transporte C. State Tran		394-8606
	0 Dor	signated Facility Name and Site Address	10. EPA ID #		D. Transporte E. State Faci		
		WATERWORKS 77 STEWART AVENUE NEWBURGH, NY 12550	NYR000236349			: <u>,</u> "À a lh.	'i
	HM	NEWBURGH, NY 12580			F. Facility's F	Phone 845-590-040	18
	11111	11. Shipping Name	anne en la companya de la companya	1	ntainers	13. Total	14. Unit
		a. NON-RCRA, NON-DOT, SOLIDS,	N.O.S (PPE)	No.	Туре	Quantity	Wt./Vol,
) (M 50	
		b.		e annorma a			
	146			and the second se			
	relation and the second s	0.					
						in a second s	
]	d.					
		-		1		, c	
	G. Ada	wither the second state of the second state and the second state of the second state o	ocument# D34334 Job #: NY0222		0#	<u>I</u>	<u> </u>
A CONTRACT AND A CONT		wither the second state of the second state and the second state of the second state o	ocument# 034334 Job#:NY0222 приск# 4605- 1/1/14 1900002M		0#	L	2 ~ 4 ²
		1)20000159 / X55-GAL DRUM; 1	THE REPORT OF AN ADDRESS OF A REPORT OF A		ON .		
- 66	15. Sp	1) 20000159 X 55-GAL DRUM; T Applov secial Handling Instructions and Additional Information	приски 4605- 1214 190002М	3. 	na tráncha Pina	d are in proper condition for tra	
- 66	15. Sp 16. OI NGA Printe	1) 20000159 X 55-GAL DRUM; T Applov Decial Handling Instructions and Additional Information Section to the applicable reputation of the Department of Transp Apple Apple Applicable reputation of the Department of Transp Apple Apple Apple Applicable reputation of the Department of Transp Apple Apple Apple Applicable reputation of the Department of Transp Apple Apple	приски 4605- 1214 190002М	3. 	na tráncha Pina	d are in proper condition for tra form hazardous waste manifest Month	nsportation Adjurgemental Date
- 66	15. Sp 16. OI 0/6 9 Printe	1) 20000159 X 55-GAL DRUM; T Applov becial Handling Instructions and Additional Information S	RUCK# 4605 14H 19D0002M ed materials are properly classified, described, packag notation. The materials described on this document a	3. 	na tráncha Pina	lorm hazardous waste (nan)lest	neportation Advirgementation Date Date Date
66	15. Sp 16. OI Car Printes 17. Tra	1) 20000159 X 55-GAL DRUM; T Applov secial Handling Instructions and Additional Information S FFEROR CERTIFICATION: I hereby certify that the above name cording to the applicable regulation of the Department of Transp Apple Applov	RUCK# 4605 14H 19D0002M ed materials are properly classified, described, packag notation. The materials described on this document a	3. 	na tráncha Pina	lorm hazardous waste (nan)lest	neportation requirements Date Date Date
	15. Sp 16. Of A C S Printed 17. Tra Printed	1) 20000159 X 55-GAL DRUM; T Applox Decial Handling Instructions and Additional Information Sectal Handling Instruction Information Sectal Handling Information Information Sectal Handling Information Infore	ed materials are properly classified, described, package of the second s	3. 	na tráncha Pina	orm hazardous waster han lest	Insportation Galignmenta Date Date Date Day Yes
	15. Sp 16. OI A C S Printed 17. Tra Printed 18. Tra 18. Tra	1) 20000159 X 55-GAL DRUM; T Applox pecial Handling Instructions and Additional Information FFEROR CERTIFICATION: I hereby certify that the above name cording to the applicable regulation of the Department of Transp Application of the Department of Transp (Application of the Department of the Department of Transp (Applica	ed materials are properly classified, described, package toptation. The materials described on this document a Creep Signature	3. 	na tráncha Pina	orm hazardous waster han test	Insportation Galignmenta Date Date Date Day Yes
	15. Sp 16. OI A C S Printed 17. Tra Printed 18. Tra 18. Tra	1) 20000159 X 55-GAL DRUM; T Applox Decial Handling Instructions and Additional Information Sectal Handling Instructions and Additional Information Sectal Handling Instructions and Additional Information Contract of the Department of Transporting to the applicable reputation of the Department of Transportant of the Department of Transporter 1 Acknowledgment of Receipt of Materials d/Typed Name ansporter 2 Acknowledgment of Receipt of Materials d/Typed Name	ed materials are properly classified, described, package of the second s	3. 	na tráncha Pina	orm hazardous waster han lest	Insportation Galignmenta Date Date Date Day Yes
	15. Sp 16. OI A C S Printed 17. Tra Printed 18. Tra 18. Tra	1) 20000159 X 55-GAL DRUM; T Applox pecial Handling Instructions and Additional Information FFEROR CERTIFICATION: I hereby certify that the above name cording to the applicable regulation of the Department of Transp Application of the Department of Transp (Application of the Department of the Department of Transp (Applica	ed materials are properly classified, described, package of the second s	3. 	na tráncha Pina	orm hazardous waster han test Month Month	Insportation Galiremental Date Date Date Day Ye
	15. Sp 16. Of Val A S S Printe 17. Tre Printe 18. Tra Printe 19. Dis	1) 20000159 X 55-GAL DRUM; T Applox pecial Handling Instructions and Additional Information FFEROR CERTIFICATION: I hereby certify that the above name cording to the applicable regulation of the Department of Transp Application of the Department of Transp (Application of the Department of the Department of Transp (Applica	ed materials are properly classified, described, packet portation. The materials described on this document a signature Signature Signature	ged, markec re not subjed	na tráncha Pina	orm hazardous waster han lest	Insportation Galignmenta Date Date Date Day Yes

	BILL OF LADING	N/A		1. Document	No. ET1142	2. Page 1 of
	3. Offeror Name and Mailing Address NATIONAL GRID 175 East Old Country Road Hicksville, NY 11801			Site Address NATIO 450 L	DNAL GRID INION ST DKLYN, NY 1123	1.05
	4. Offeror Phone () 347-213-8874 5. Transporter 1 Company Name	6. EPA ID #		A. State Transp		
	MILLER ENVIRONMENTAL GROUP, INC	NYD986908085	;	B. Transporter		0-394-86(
	7. Transporter 2 Company Name	8. EPA ID #		C. State Transp	porter's ID	
		2		D. Transporter		
	9. Designated Facility Name and Site Address NORLITE, LLC 628 S. SARATOGA ST. COHOES, NY 12047	10. EPA ID # NYD080469935		E. State Facilit F. Facility's Ph		401
	HM 11. Shipping Name	. "		ontainers	13. Total	14 Ur
	a NON-RCRA NON-DOT REGILLATED	LIQUIDO N O C (DNADLE)	No.	Туре	Quantity	Wt./
	a. NON-RCRA NON-DOT REGULATED	LRUIDS N.U.S.(DNAPLE)	2	D	M 105	
GENE	D.					i II
R A T O	c.			~		
R	d.				.E	35
	1) APPROVAL#X 55-GA	pr:1000362816				
	15. Special Handling Instructions and Additional Information	1				
TR	15. Special Handling Instructions and Additional Information 16. OFFEROR CERTIFICATION: I hereby certify that the above named ma according to the applicable regulation of the Department of Transportation Printed/Typed Name 17. Transporter 1 Acknowledgment of Receipt of Materials	on, The materials described on this document a	aged, marked are not subje	ct to federal unifo	rm hazardous waste mani	fest requiremen Date onth Day Date
R A N	15. Special Handling Instructions and Additional Information 16. OFFEROR CERTIFICATION: I hereby certify that the above named ma according to the applicable regulation of the Department of Transportation According to the applicable regulation of the Department of Transportation Printed/Typed Name	on. The materials described on this document a	are not subje	ct to federal unifo	rm hazardous waste mani	Date
R A N S P O	15. Special Handling Instructions and Additional Information 16. OFFEROR CERTIFICATION: I hereby certify that the above named ma according to the applicable regulation of the Department of Transportation Printed/Typed Name 17. Transporter 1 Acknowledgment of Receipt of Materials	on, The materials described on this document a	are not subje	ct to federal unifo	rm hazardous waste mani	fest requiremen Date onth Day Date
RANSPORTE	15. Special Handling Instructions and Additional Information 16. OFFEROR CERTIFICATION: I hereby certify that the above named ma according to the applicable regulation of the Department of Transportation Printed/Typed Name 17. Transporter 1 Acknowledgment of Receipt of Materials Printed/Typed Name	on, The materials described on this document a	are not subje	ct to federal unifo	rm hazardous waste mani	fest requirement Date Date Date Date Date
RANSPORT	15. Special Handling Instructions and Additional Information 16. OFFEROR CERTIFICATION: I hereby certify that the above named ma according to the applicable regulation of the Department of Transportation Printed/Typed Name 17. Transporter 1 Acknowledgment of Receipt of Materials Printed/Typed Name 18. Transporter 2 Acknowledgment of Receipt of Materials	Signature	are not subje	ct to federal unifo	rm hazardous waste mani	fest requirement Date Date Date Date Date Date

1



GZA GeoEnvironmental of New York