

Monthly Report No. 7

450 UNION STREET NAPL GAUGING AND RECOVERY MONTHLY REPORT – OCTOBER 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 October 26, 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	10/26/22	10.10	38.65	10.25	35	Trace	Trace
RW-02	10/26/22	10.25	47.20	11.15	105	Trace	Trace

- The area around each well was covered with polyethylene sheeting prior to performance of gauging and recovery activities.
- Approximately 140 gallons of DNAPL/water mixture was recovered from the two wells during the October 26, 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>11/08/2022</u> Date

1. Clark

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

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	



ATTACHMENT A

DISPOSAL MANIFEST

B	ILL OF LADING	N/A		1. Docume		D3282	2. Page 1 5 of
4. 01	fferor Name and Malling Address NATIONAL GRID 175 East Old Country Road Hicksville, NY 11801 fferor Phone () 347-213-8	SP 6 7 8		Site Addres	6 - 5 - 5 6 - 5	NATIONAL 450 UNIO BROOKLY	. GRID N ST N, NY 1 1231
5. Tra	ansporter 1 Company Name MILLER ENVIRONMENTAL	GROUP, INC	1709866	A. State Tra 39085 B. Transpor	nsporter's ID		800
7. Tra	ansporter 2 Company Name	8. EPA ID #		A STORE AS BRIDE AS A DESCRIPTION OF A D	nsporter's ID	sanising Philipping Series	000
 *			a a		ter 2 Phone		an da anna ann an ann an ann an ann an an an
9. De	esignated Facility Name and Site Address NORLITE, LLC	10, EPA ID #	1700804	E. State Fa	cliity's ID	, ^g	1
НМ	NORLITE, LLC 628 S. SARATOGA ST. COHOES, NY 12047			F. Facility's	Phone	energen en der gege T	518-235-04
	11. Shipping Name		12, C No.	ontainers (Type	*	13. Total Iantity	14. Unit Wt./Vot.
	a. NON-RCRA, NON-DC	OT REGULATED LIQUIDS N.O.S	No. of Concession, Name	And The All Property of the Party of the Party of the	140		
and the second se		$\mathbf{\hat{x}}$	3	DY	PLA	-CR2	G
	b .						s in the second s
		* .					
<u>Cièrean</u>	0r;						
			4		and a second sec	i can	u latarez de
					10		
General		*	-	[terfanli de men inter di til de segar pero	
G. Ad	d. i dilitional Descriptions for Materials Listed Above 1) APPROVAL®/100036	Document≢ D32825 2 <u>876</u> x55-GAL DRUM; TRU	 I I 	a Rodriga Andreas national states and add	59 PO#	2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1446.23	iditional Descriptions for Materials Listed Above 1) APPROVAL®/100036	Document# D32825	 I I 	a Rodriga Andreas national states and add	59 PO#		
10046-2019	t Iditional Descriptions for Materials Listed Above	Document# D32825	 I I 	a Rodriga Andreas national states and add	59 PO#		
15. Sj 16. O	iditional Descriptions for Materials Listed Above 1) APPROVAL®/100036	Document # D32825 오장기 & X 55-GAL DRUM; TRU	CK# (d and labeled a	nd are in proper-	condition for tra waste manifest	nsportation regulfements.
15. SI 16. Ol ac	Iditional Descriptions for Materials Listed Above 1) APPROVAL® 100036 pectal Handling Instructions and Additional Information FFEROR CERTIFICATION: I hereby certify that the above named n scording to the applicable regulation of the Department of Transporter CARCENTE	Document # D32825 25/6 x 55-GAL DRUM; TRU haterials are properly classified, described, pack	CK# (d and labeled a	nd are in proper-	waste manifest 1012	requirements.
15. SI 16. Ol ac	dditional Descriptions for Materials Listed Above 1) APPROVAL® 100036 pecial Handling Instructions and Additional Information FFEROR CERTIFICATION: I hereby certify that the above named n	Document # D32825 오장기 & X 55-GAL DRUM; TRU	CK# (d and labeled a	nd are in proper-	waste manifest	requirements.
15. Sp 16. O ac <u>S. S.</u> Printe	Iditional Descriptions for Materials Listed Above 1) APPROVAL® 100036 pectal Handling Instructions and Additional Information FFEROR CERTIFICATION: I hereby certify that the above named n scording to the applicable regulation of the Department of Transporter CARCENTE	Document # D32825 25/6 x 55-GAL DRUM; TRU haterials are properly classified, described, pack	CK# (d and labeled a	nd are in proper-	waste manifest 1012	requirements.
15. Sp 16. Ol ac 9 <u>S</u> 2 Printe	Iditional Descriptions for Materials Listed Above 1) APPROVAL® 100036 pecial Handling Instructions and Additional Information FFEROR CERTIFICATION: I hereby certily that the above named n coording to the applicable regulation of the Department of Transporter AActive Society Contents of Content of Conte	Document # D32825 25/6 x 55-GAL DRUM; TRU haterials are properly classified, described, pack	CK# (d and labeled a	nd are in proper-	waste manifest 1612 Month Month	requirements. Date Day Year Date Date
15. Sp 16. Ol ac 9 <u>S</u> 17. Tre Printe	dilitional Descriptions for Materials Listed Above 1) APPROVAL® 100036 pecial Handling Instructions and Additional Information FFEROR CERTIFICATION: I hareby certify that the above named n scording to the applicable regulation of the Department of Transporter CAACCHE SCORE (IDCA) ansporter 1 Acknowledgment of Receipt of Materials	Document & D32825	CK# (d and labeled a	nd are in proper-	waste manifest	requirements. Date Day Year Date Date
15. Sj 16. O ac Printe 17. Tra Printe	dilitional Descriptions for Materials Listed Above 1) APPROVAL® 100036 pecial Handling Instructions and Additional Information IFFEROR CERTIFICATION: I hereby certify that the above named n scording to the applicable regulation of the Department of Transporter AAcchic Social Content of Materials ansporter 1 Acknowledgment of Receipt of Materials ad/Typed Name	Document & D32825	CK# (d and labeled a	nd are in proper-	waste manifest 1612 Month Month	requirements: Date Day Year Date Day Year Z (2) (2) (2) Date
15. Sp 16. O ac 9 <u>S'</u> Printe 17. Trc Printe 18. Trc Printe	Iditional Descriptions for Materials Listed Above 1) APPROVAL® 100036 pecial Handling Instructions and Additional Information FFEROR CERTIFICATION: I hereby certily that the above named in scording to the applicable regulation of the Department of Transporter CARCELE CONTROL OF The Department of Transporter CARCELE CONTROL OF TRANSPORTER ansporter 1 Acknowledgment of Receipt of Materials ansporter 2 Acknowledgment of Receipt of Materials	Document # D32825	CK# (d and labeled a	nd are in proper-	waste manifest Vol 2 Month Month	requirements:
15. Sp 16. O ac 9 <u>S'</u> Printe 17. Trc Printe 18. Trc Printe	Iditional Descriptions for Materials Listed Above 1) APPROVAL® 100036 pecial Handling Instructions and Additional Information FFEROR CERTIFICATION: I hereby certify that the above named in scording to the applicable regulation of the Department of Transporter CARCHE SCORE ansporter 1 Acknowledgment of Receipt of Materials ansporter 2 Acknowledgment of Receipt of Materials ansporter 3 Acknowledgment of Receipt of Materials ansporter 3 Acknowledgment of Receipt of Materials ansporter 3 Acknowledgment of Receipt of Materials	Document # D32825	CK# (d and labeled a	nd are in proper-	waste manifest Vol 2 Month Month	requirements: Day Year Date Day Year Zu BS Date Day Year Date
15. Sp 16. O ac 9 S Printe 17. Trr Printe 18. Trr 18. Trr 19. Dis	Iditional Descriptions for Materials Listed Above 1) APPROVAL® 100036 pecial Handling Instructions and Additional Information FFEROR CERTIFICATION: I hereby certify that the above named in scording to the applicable regulation of the Department of Transporter CARCHE SCORE ansporter 1 Acknowledgment of Receipt of Materials ansporter 2 Acknowledgment of Receipt of Materials ansporter 3 Acknowledgment of Receipt of Materials ansporter 3 Acknowledgment of Receipt of Materials ansporter 3 Acknowledgment of Receipt of Materials	Document # D32825	CK# (d and labeled a	nd are in proper-	waste manifest Vol 2 Month Month	requirements: Date Date Date Date Data Data Data Daty Year
15. Sy 16. O ac Printe 17. Tre Printe 18. Tre Printe	Iditional Descriptions for Materials Listed Above 1) APPROVAL® 100036 pecial Handling Instructions and Additional Information FFEROR CERTIFICATION: 1 hereby certily that the above named n coording to the applicable regulation of the Department of Transporter AAcate Social Content of Materials ansporter 1 Acknowledgment of Receipt of Materials ansporter 2 Acknowledgment of Receipt of Materials ansporter 2 Acknowledgment of Receipt of Materials ansporter 2 Acknowledgment of Receipt of Materials and/Typed Name screpancy Indication Space	Document & D32825	CK# (d and labeled a	nd are in proper-	waste manifest Vol 2 Month Month	requirements: Day Year Date Day Year Zu BS Date Day Year Date
15. Sy 16. O ac Printe 17. Tre Printe 18. Tre Printe	Iditional Descriptions for Materials Listed Above 1) APPROVAL® 100036 pecial Handling Instructions and Additional Information FFEROR CERTIFICATION: I hereby certify that the above named in scording to the applicable regulation of the Department of Transporter CARCHE SCORE ansporter 1 Acknowledgment of Receipt of Materials ansporter 2 Acknowledgment of Receipt of Materials ansporter 3 Acknowledgment of Receipt of Materials ansporter 3 Acknowledgment of Receipt of Materials ansporter 3 Acknowledgment of Receipt of Materials	Document & D32825	CK# (d and labeled a	nd are in proper-	waste manifest Vol 2 Month Month	requirements: Day Year Date Day Year Zu BS Date Day Year Date

					1. Document		2. Page 1	0.0
	ILL OF LADING	N	IA			MET1	105 of	
	eror Name and Mailing Address NATIONAL GRID 175 East Old Country Road Hicksville, NY 11801 347-213-8		1		Site Address	NATIONA 450 UNIC BROOKL	L GRID N ST YN, NY 112	31
					A. State Trans	and all D		
· ind	nsporter 1 Company Name	. GROUP, INC	NI	/D9869	B. Transporter			800
Tra	nsporter 2 Company Name	8. EPA ID #			C. State Trans	porter's ID		
Do	nignated English Name and Site Address	10. EPA ID #			D. Transporter			
	signated Facility Name and Site Address WATERWORKS 77 STEWART AVENUE NEWBURGH, NY 12550	10. EPA 10 #	NA	A	E. State Facili F. Facility's Pl	2 ¹⁶	845-590	-04
M	11. Shipping Name			12 00	ontainers	13.	14.	_
	1			No. 7	Type	Total Quantity	Unit Wt./Vol,	
	a. NON-RCRA, NON-DC	DT, SOLIDS, N.O.S (F	PE)	一次的	DM	60	P	
		× .	0 % (and %	N.	DY	60 DM	19	
	b.				192.38			-
	с.					2	298	
					2			
	d.							
								1
Add	litional Descriptions for Materials Listed Above	Document	# D32826 J	lob 绯: N	Y0222115	PO#	S.	
	1) 20d00159 Truck#							
		10						
		621						
. Sp	ecial Handling Instructions and Additional Information	621						
. Sp	ecial Handling Instructions and Additional Information	(e2)						
. Sp	ecial Handling Instructions and Additional Information	621						
. OF	FEROR CERTIFICATION: I hereby certify that the above named n	naterials are properly classified	, described, packag	ed, marked	and labeled and	are in proper condition for tr	e ansportation	
. OF	FEROR CERTIFICATION: I hereby certify that the above named n pording to the applicable regulation of the Department of Transporte	naterials are properly classified	, described, packag	ed, marked	and labeled and to federal unifo	rm hazardous waste manifes	t requirements.	
OF acc	FEROR CERTIFICATION: I hereby certify that the above named n cording to the applicable regulation of the Department of Transporter S. Agente, Sc. Sc. Co.	naterials are properly classified ation. The materials described o	, described, packag In this document are	ed, marked	and labeled and to federal unifo	rm hazardous waste manifes	t requirements.	
OF acc	FEROR CERTIFICATION: I hereby certify that the above named n cording to the applicable regulation of the Department of Transporte	naterials are properly classified ation. The materials described o	, described, packag on this document are	ed, marked	and labeled and t to federal unifo	rm hazardous waste manifes	t requirements.	jear
. OF acc) S	FEROR CERTIFICATION: I hereby certify that the above named n cording to the applicable regulation of the Department of Transporter S. Agente, Sc. Sc. Co.	naterials are properly classified ation. The materials described o	, described, packag on this document are	ed, marked	and labeled and to federal unifo	rm hazardous waste manifes	trequirements. Date	jear
. OF acc) S ntec Tra	FEROR CERTIFICATION: I hereby certify that the above named in cording to the applicable regulation of the Department of Transporte Sagente Science Control (Control of the Control of the	naterials are properly classified ation. The materials described o	, described, packag on this document ar	ed, marked	and labeled and t to federal unifo	rm hazardous waste manifes	t requirements. Date th Day Ye Date	jear jear
. OF acc S ntec	FEROR CERTIFICATION: I hereby certify that the above named in cording to the applicable regulation of the Department of Transporte Jorden Science Scie	naterials are properly classified ation. The materials described of Signature	, described, packag on this document are	ed, marked Thot subject	and labeled and to federal unifo	rm hazardous waste manifes	t requirements. Date The Day Ye Date The Day Ye Date The Day Ye Date	_
. OF acc S ntec Tra ntec	FFEROR CERTIFICATION: I hereby certify that the above named in cording to the applicable regulation of the Department of Transporte Say and the Department of Transporter I/Typed Name	naterials are properly classified ation. The materials described of Signature Signature	, described, packag on this document ar	ed, marked 3 not subject	and labeled and t to federal unifo	m hazardous waste manifes	t requirements. Date Date Date Daty Ye Date Date Date Date	ear
Tra Tra	FEROR CERTIFICATION: I hereby certify that the above named in sording to the applicable regulation of the Department of Transporter VTyped Name Insporter 1 Acknowledgment of Receipt of Materials VTyped Name	naterials are properly classified ation. The materials described of Signature	, described, packag on this document are	ed, marked hot subjec	and labeled and to federal unifo	rm hazardous waste manifes	t requirements. Date Date Date Daty Ye Date Date Date Date	_
. OF acc S ntec Tra ntec	FEROR CERTIFICATION: I hereby certify that the above named in pording to the applicable regulation of the Department of Transporter V/Typed Name Insporter 1 Acknowledgment of Receipt of Materials V/Typed Name	naterials are properly classified ation. The materials described of Signature Signature	, described, packag on this document ar	ed, marked a hot subject	and labeled and to federal unifo	m hazardous waste manifes	t requirements. Date Date Date Daty Ye Date Date Date Date	iear
. OF acc S ntec Tra ntec	FEROR CERTIFICATION: I hereby certify that the above named in sording to the applicable regulation of the Department of Transporter VTyped Name Insporter 1 Acknowledgment of Receipt of Materials VTyped Name	naterials are properly classified ation. The materials described of Signature Signature	, described, packag	ed, marked hot subjec	and labeled and to federal unifo	m hazardous waste manifes	t requirements. Date Date Date Daty Ye Date Date Date Date	ear
. OF acc S ntec Tra ntec	FEROR CERTIFICATION: I hereby certify that the above named in sording to the applicable regulation of the Department of Transporter VTyped Name Insporter 1 Acknowledgment of Receipt of Materials VTyped Name	naterials are properly classified ation. The materials described of Signature Signature	, described, packag	ed, marked a hot subject	and labeled and to federal unifo	m hazardous waste manifes	t requirements. Date Date Date Daty Ye Date Date Date Date	iear
· OF acco) S ntec Tra ntec Dis	FEROR CERTIFICATION: I hereby certify that the above named in sording to the applicable regulation of the Department of Transporter Agent Control of the Department of Transporter /Typed Name Insporter 1 Acknowledgment of Receipt of Materials /Typed Name Insporter 2 Acknowledgment of Receipt of Materials /Typed Name crepancy Indication Space	naterials are properly classified ation. The materials described of Signature Signature Signature	n this document are	And subject	and labeled and to federal unifo	m hazardous waste manifes	t requirements. Date Date Date Daty Ye Date Date Date Date	iear
. OF acco Macco Tra ntec Tra ntec Dis	FEROR CERTIFICATION: I hereby certify that the above named in sording to the applicable regulation of the Department of Transporter VTyped Name Insporter 1 Acknowledgment of Receipt of Materials VTyped Name	naterials are properly classified ation. The materials described of Signature Signature Signature	n this document are	And subject	and labeled and to federal unifo	m hazardous waste manifes	t requirements. Date Date Date Daty Ye Date Date Date Date	ear

BILL OF LADING



GZA GeoEnvironmental of New York