

SEOTECHNICAL

ENVIRONMENTAL

ECOLOGICAL

WATER

CONSTRUCTION MANAGEMENT

GZA GeoEnvironmental of NY 104 West 29th Street 10th Floor New York, NY 10001 T: 212.594.8140 F: 212.279.8180 www.gza.com



February 13, 2017 File No. 12.0076485.00

Via email: yukyin.wong@dec.ny.gov Mr. Bryan Wong New York State Department of Environmental Conservation Division of Environmental Remediation, Region 2 47-40 21<sup>st</sup> Street Long Island City, New York 11101

Re: Project Status Report

Former NuHart Plastic Manufacturing Site # 224136

280 Franklin Street Brooklyn, New York

Dear Mr. Wong:

Goldberg Zoino and Associates of New York, PC d/b/a GZA GeoEnvironmental of New York is transmitting this Project Status Report on behalf of Dupont Street Developers, LLC for the above referenced Site. Copies of this Project Status Report have also been provided to Dawn Hettrick of the New York State Department of Health. The Project Status Report is for December 2017 to January 2018. If you have any questions, please contact us at 973-774-3302 or 973-774-3307.

Sincerely,

GZA GeoEnvironmental of New York,

Steven Roland, P.E. Senior Consultant

Principal

David M. Winslow, Ph.D., P.G.

Ernest R. Hanna, P.E. Consultant Reviewer

Cc:

Dawn Hettrick (NYSDOH)
Dupont Street Developers, LLC
Joseph Brunner
Jane O'Connell (NYSDEC)
Wendy A. Marsh

Email: jane.oconnell@dec.ny.gov Email: wmarsh@hancocklaw.com

Email: bojinzhu@gmail.com

Email: yb321@yahoo.com

Email: dawn.hettrick@health.ny.gov



GEOTECHNICAL

ENVIRONMENTAL

ECOLOGICAL

WATER

CONSTRUCTION MANAGEMENT

GZA GeoEnvironmental of NY 104 West 29th Street 10th Floor New York, NY 10001 T: 212.594.8140 F: 212.279.8180 www.gza.com



This status report summarizes activities conducted at the Former NuHart Plastic Manufacturing Site (Site) in January 2017. Activities during this period were conducted by GZA GeoEnvironmental, of New York. (GZA). GZA representatives also participated in Site evaluations and communications, and additional activities were conducted by others, as noted below. A Site Plan showing the general Site layout, nearby area, and associated wells is included as Figure 1. Schedule information is presented under each activity discussion.

Interim remedial measure (IRM) activities for monitoring and removal of light non-aqueous-phase liquid (LNAPL) at the Site were performed during the monitoring period in general conformance with the NYSDEC-approved Operation, Maintenance and Monitoring Plan (OM&M Plan) for the product recovery system. Investigation activities for the Site were previously completed as documented in previous project status reports and are not discussed herein.

#### **Interim Remedial Measure Activities**

Monthly IRM routine activities were conducted by GZA on January 31<sup>st</sup>, 2018. A table documenting the apparent LNAPL thickness measurements is provided as Attachment A and a Well Location Map showing the extent of LNAPL based on the monitoring date is provided as **Figure 1**.

#### **Maintenance Activities**

General maintenance activities were performed, including collection of spent IRM-related absorbent materials in the vicinity of recovery wells, placing new absorbent materials as needed to contain LNAPL, and proper labeling of waste containers used during this IRM event. On January 31<sup>st</sup>, 2018, Miller Environmental Group, Inc (Miller) replaced the high level switch associated with the recovery system RW-12. The RW-12 was powered on immediately after the repair. Because Miller ordered the wrong size belt, associated with RW-8, Miller will revisit the site to fix the RW-8 when the new order is received. We will advise DEC once notified and include details in the next report.

#### Monitoring and LNAPL Removal

Gauging of onsite and offsite monitoring and recovery wells associated with the Site was conducted on January 31<sup>st</sup>, 2018. Well gauging was conducted from 7:55 am to 16:30 pm. Flood tides were observed with high tide at 9:05 am and Low tide at 3:19 pm. (ref. NOAA/NOS/CO-OPS Station ID (8517673) Hunters Point, Newtown Creek, NY). The wells that could not be accessed are noted on **Attachment A**. All wells containing LNAPL are noted, as are wells where LNAPL is absent. No changes were noted in the horizontal extent of the LNAPL. The depths to the water table were variable relative to the depths noted in the November 2017 status report, with some wells showing increases and some wells showing decreases. LNAPL apparent thicknesses were also variable, with increases generally noted in wells where the depth to water increased and decreases noted in wells where the depth to water decreased.





Based on previous LNAPL estimates, an estimated 2,767 gallons of product have been removed from the subsurface since early 2015, with most of the LNAPL disposed. The removed LNAPL is stored in intermediate bulk container (IBC) tanks located in the Site building, pending pickup and offsite disposal. When the IBC tanks are nearly full and/or the containerized spent absorbent materials require disposal, the designated waste management company will be contacted and waste disposal requested.

Eastern Environmental Solutions, Inc. (Eastern) is presently contracted to conduct waste management activities for disposal of product from the IBC tanks at the Site. Waste removal was conducted on August 11, 2017 and included removal of approximate 500 gallons of product for proper offsite disposal. To date, Eastern has transported and disposed an estimated 2,616 gallons of product at the Cycle Chem facility in Elizabeth, NJ as hazardous waste. The executed manifest will be provided in the next monthly report. Waste transport and disposal information will continue to be included in the progress reports following the months during which waste disposal activities occur.

Langan is planning the next phase of construction at the nearby Greenpoint Landing project and are proposing dewatering activities similar that conducted in 2016. GZA reviewed information provided by Langan for GW dewatering adjacent to the NuHart site and has provided input on monitoring to be conducted during construction.

# **Feasibility Study**

GZA submitted a Thermal Treatability and In-Situ Chemical Oxidation Study Work Plan to NYSDEC on May 22<sup>nd</sup>, 2017. The NYSDEC provided the comments regarding this work plan on July 7<sup>th</sup>, 2017. GZA have collected the pilot study samples on September 20<sup>st</sup> through September 22<sup>nd</sup>, and October 3<sup>rd</sup>, 2017. The thermal portion of the pilot study is completed; The chemical oxidization portion of the pilot study is still in process. GZA has prepared a memo to summarize the thermal portion of the treatability study and submitted to NYSDEC on January 19<sup>th</sup>, 2018. The final report which include the chemical oxidation results is under development and pending authorization by the owner.

#### Site Soil Management Report

Pursuant to a request by the NYSDEC, GZA prepared the Site Soil Management Plan (SSMP) on October 28, 2016 to provide guidance for utility contractors regarding management for soils and groundwater potentially impacted by the Site. SSMP was followed during the pilot study sampling event.

#### **Attachments**

Attachment A – Apparent Thickness of LNAPL

Figure 1 – Well Location Map showing areal extent of LNAPL on groundwater

Readings taken 1/31/18 between 7:55 am and 16:30 pm (high tide @ 9:05 am and Low tide @ 3:19 pm)

	and Low tide	C 0120 p,																							App	arent Thio	ckness of LN	NAPL (feet	)						
Well Number	*Depth to	*Depth to Water	2018						2017											2016					**				,			2015			
	Product (feet)	(feet)	Jan-18	Nov-17	Oct-17	Sep-17	Aug-17	Jul-17	Jun-17	May-17	Apr-17	Mar-17	Feb-17	Jan-17	Dec-16	Nov-16	Oct-16	Sep-16	Aug-16	Jul-16	Jun-16	May-16	Apr-16	Mar-16	Feb-16	Jan-16	Dec-15	Nov-15	Oct-15	Sep-15 A	ng-15 Jr	ful-15 Jun	m-15 May	15 Apr-15	5 Mar-15 Jan-15
MW – 4	12.38	13.3	0.92	2.12	0.81	1.76	1.73	1.23	1.77	ND*	1.32	1.61	1.13	1.31	1.30	1.00	1.18	1.35	1.71	1.73	1.80	1.53	1.73	1.43	1.85	1.77	1.96	2.04					0.35 0.44		0.56 —
MW - 5	10.88	15.53	4.65	5.83	2.19	4.44	4.4	3.71	3.54	2.81	2.80	3.13	4.05	3.00	3.55	4.43	3.64	3.22	4.31	4.03	4.29	3.07	3.18	3.14	1.85	3.24	4.83	5.41	4.16				2.30 2.41		3.10 4.40
MW - 6	10.69	_	##	##	1.22	3.19	3.15	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##			2.30 ##	_	## ##
MW - 7	11.08	14.40	3.32	4.91	1.48	1.45	1.41	0.9	0.00	1.50	1.92	2.53	3.71	1.28	0.78	1.73	0.91	0.04	1.89	1.58	2.22	2.11	1.90	1.66	2.31	2.47	3.44	3.31	2.58	1.46	1.28 0	0.99 1.5	1.58 ND	1.94	1.79 ##
MW - 8	ND	10.97	ND	ND	ND	ND	ND	ND N	ND N	ND ND	ND	ND —																							
MW – 12	ND	7.15	ND	_	-	-	ND	ND	-	-	-	_ N	ND ND	ND	ND —																				
MW - 13	ND	8.55	ND	_	_	ND	ND	_	-		- N	ND ND	ND	ND —																					
MW – 14	ND	9.69	ND	ND	ND	ND	ND	ND N	ND N	ND ND	ND	ND ND																							
MW - 15	11.52	14.68	3.16	1.78	0.31	0.29	0.26	0.26	0.24	0.12	0.22	0.28	0.40	0.31	0.20	0.80	0.20	0.17	0.81	0.07	0.48	0.22	0.71	0.03	0.04	0.60	3.08	3.07	1.97	1.05	1.05 N	ND 1.2	1.24 1.21	1.56	1.67 1.71
MW – 16	12.32	12.66	0.34	0.25	0.35	0.37	0.35	0.08	0.28	0.03	0.10	0.23	0.20	0.31	ND	ND	ND	ND	ND	0.01	0.25	0.02	0.01	0.02	0.16	0.02	0.11	0.02	0.12	0.05	0.05 0	0.14 0.1	0.13 0.15	0.03	0.08 0.02
MW - 20	11.58	14.73	3.15	3.99	2.52	2.58	2.63	2.9	2.83	2.61	2.94	2.33	3.02	3.02	2.88	3.28	2.90	3.16	2.89	2.88	2.85	2.22	2.49	2.43	1.99	2.46	3.52	3.02	3.33	3.25	3.12 2	2.88 2.5	2.58 2.79	3.84	4.38 5.13
MW - 21	12.44	16.27	3.83	4.79	3.26	3.35	2.13	1.45	2.75	3.31	3.30	3.04	3.62	7.59	3.27	3.32	1.25	2.39	3.61	2.96	2.95	2.63	4.18	2.68	2.42	2.97	4.46	3.85	4.51	3.63	3.32 2	2.97 2.5	2.53 2.77	7 2.98	3.46 3.23
MW - 22	13.21	13.58	0.37	1.77	1.25	1.24	1.21	0.75	0.66	0.66	0.78	0.64	0.65	0.50	0.51	0.38	0.30	0.01	0.51	0.87	0.62	0.45	0.48	0.44	0.15	0.22	1.33	1.01	0.49	1.17	1.04 0	0.79 0.8	0.86 0.84	0.74	1.33 1.27
MW - 23	ND	12.28	ND	ND	ND	ND	ND	ND N	ND N	ND ND	ND	ND ND																							
MW - 24	ND	11.47	ND	ND	ND	ND	ND	ND N	ND N	ND ND	ND	ND ND																							
MW – 25	11.21	14.87	3.66	4.54	4.03	4.05	4.02	3.73	4.09	3.85	3.70	3.74	3.47	3.89	3.62	3.60	4.20	3.79	3.65	4.01	3.75	3.55	3.33	3.42	3.32	3.43	3.68	3.53	3.63	3.53	3.68 3	3.53 2.8	2.81 3.24	3.36	1.07 1.03
MW - 26	11.26	15.21	3.95	5.59	3.81	3.82	3.79	3.65	3.42	3.29	3.73	3.64	3.24	3.14	3.20	3.56	4.00	3.28	4.26	3.58	3.82	3.41	3.37	2.97	3.82	3.41	4.23	4.08	3.77	4.00	3.70 3	3.65 3.1	3.18 3.33	3.64	4.14 4.11
MW – 27	ND	_	ND	ND	ND	ND	ND	ND N	ND N	ND ND	ND	ND ND																							
MW – 28	ND	12.10	ND	ND	ND	ND	ND	ND N	ND N	ND ND	ND	ND ND																							
MW - 29	ND	12.25	ND	ND	ND	ND	ND	ND N	ND N	ND ND	ND	ND ND																							
MW - 30	ND	10.86	ND	ND	ND	ND	ND	ND N	ND N	ND ND	ND	ND ND																							
MW - 31	ND	10.19	ND	_	_	_	_	_	ND	ND	_	ND	ND	ND N	ND N	ND ND	ND	ND ND																	
MW – 32	ND	10.90	ND	ND	ND					ND ND		ND ND																							
MW – 34	ND	12.69	ND	ND	ND					ND ND		ND ND																							
MW – 35	ND	15.57	ND	ND	ND					ND ND	_	ND ND																							
MW – 36	ND	11.40	ND	ND	ND					ND ND		ND ND																							
MW – 37	ND	DRY	ND	ND	ND	ND				ND ND		ND ND																							
MW – 38	ND	10.97	ND	_	_	_	_	_	ND	ND	ND					ND ND		ND —																	
MW – 39	ND	9.72	ND	ND	ND					ND ND	_	ND ND																							
MW – 40	ND	8.08	ND	ND	_					ND ND		ND ND																							
MW – 41	ND	10.84	ND	ND	ND					ND ND		ND ND																							
MW – 42	ND	11.11	ND	ND	ND					ND ND		ND ND																							
RW - 1	ND	9.78	ND	ND	_					ND ND		ND ND																							
RW – 2	12.97	16.98	4.01	5.19	0.56	0.58	0.53	6.09	6.25	0.42	1.13	2.90	3.09	3.53	1.65	1.18	1.26	1.35	1.88	2.05	2.41	3.02	2.12	3.34	2.70	2.83	4.28	_					5.28 5.44	_	
RW – 3	16.03	ND	ND	3.31	3.17	3.15	3.22	2.28	3.44	2.85	2.71	3.46	2.98	3.10	1.91	3.95	2.40	2.50	3.08	1.97	2.49	1.64	2.17	2.09	1.64	2.37	4.27	2.92					2.23 2.23		3.28 3.41
RW - 4	13.17	16.23	3.06	4.32	4.33	4.17	4.18	3.1	4.1	03.69	3.65	3.69	3.67	3.05	3.80	2.80	2.77	3.30	2.73	2.65	2.32	2.02	2.22	2.93	2.03	2.51	2.82	2.31					3.66 3.53		1.43 1.35
RW - 5	12.86	13.35	0.49	4.49	5.28	5.27	5.26	5.42	3.75	5.00	5.44	5.10	0.70	2.95	1.55	3.05	0.42	0.36	0.50	4.97	2.76	2.47	2.66	3.21	2.53	1.92	1.96	5.64					4.69 4.75		0.85 0.91
RW - 6	11.51	14.12	2.61	1.64	0.73	0.6	1.61	0.93	5.35	1.05	1.27	1.22	0.90	0.90	0.85	0.68	0.87	0.92	1.46	1.29	0.81	0.67	0.73	0.74	0.76	0.74	0.77	0.65	0.66	0.65			1.96 2.35		1.19 1.14
RW - 8 **	14.81	16.8	1.99	- 50	1.15	2.2	3.62	1.2	2.34	0.02	0.01	2.50	-	- 2.47	- 2.00	-	-		- 2.10	- 2.15		- 2.75	- 2.00	2.01		2.45	-	4.27	- 2.52	2.50				2.14	2.93 2.92
RW - 9	14.33	18.65	4.32	5.58	3.72	3.77	3.69	2.84	3.25	2.70	2.69	3.50	3.66	2.47	3.09	3.57	2.45	2.35	3.19	2.15	3.18	2.75	3.09	3.81	2.42	3.46	4.62	4.37					4.82 4.79		
RW - 10	13.12	17.76	4.64	4.28	3.65	3.67	3.71	3.67	3.78	4.07	3.79	4.27	4.70	4.15	3.86	3.45	3.80	3.36	4.44	3.91	3.69	3.74	3.66	3.67	4.69	4.77	4.46	5.32					3.80 3.95		4.96 5.04
RW - 11	14.38	19.39	5.01	5.5	2.97	4.57	3.93	2.33	3.00	2.92	3.00	3.55	3.73	2.65	1.90	2.04	2.43	2.12	3.66	2.98	3.43	3.08	2.94	3.05	2.45	3.07	4.65	4.39	3.59	3.24	3.62 3	3.43 3.6	3.66 3.67	3.00	3.87 3.97
RW-12 **	14.02	15.52	1.5	5.96	3.65	5.4	2.68	0.01	0.03	0.01	0.02	0.80	3.89	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_	_		<u> </u>			

Data Recorded using an oil/water interface probe, measurements from the tops of well casings

## = :LNAPL observed, apparent thickness not determinded

NI = Not Installed

ND = Not Detected

Wells MW-1, MW-2, MW-9, MW-10, MW-17, MW-18, MW-19, and RW-7 are associated with NYSDEC Spill 06-01852 and are under a separate investigation

Well-34 has uneven casting top
est= Estimated Value
\* = Well was dry
\*\* = Well equipped with automated product recovery system

\_= Data not recorded due to access issues

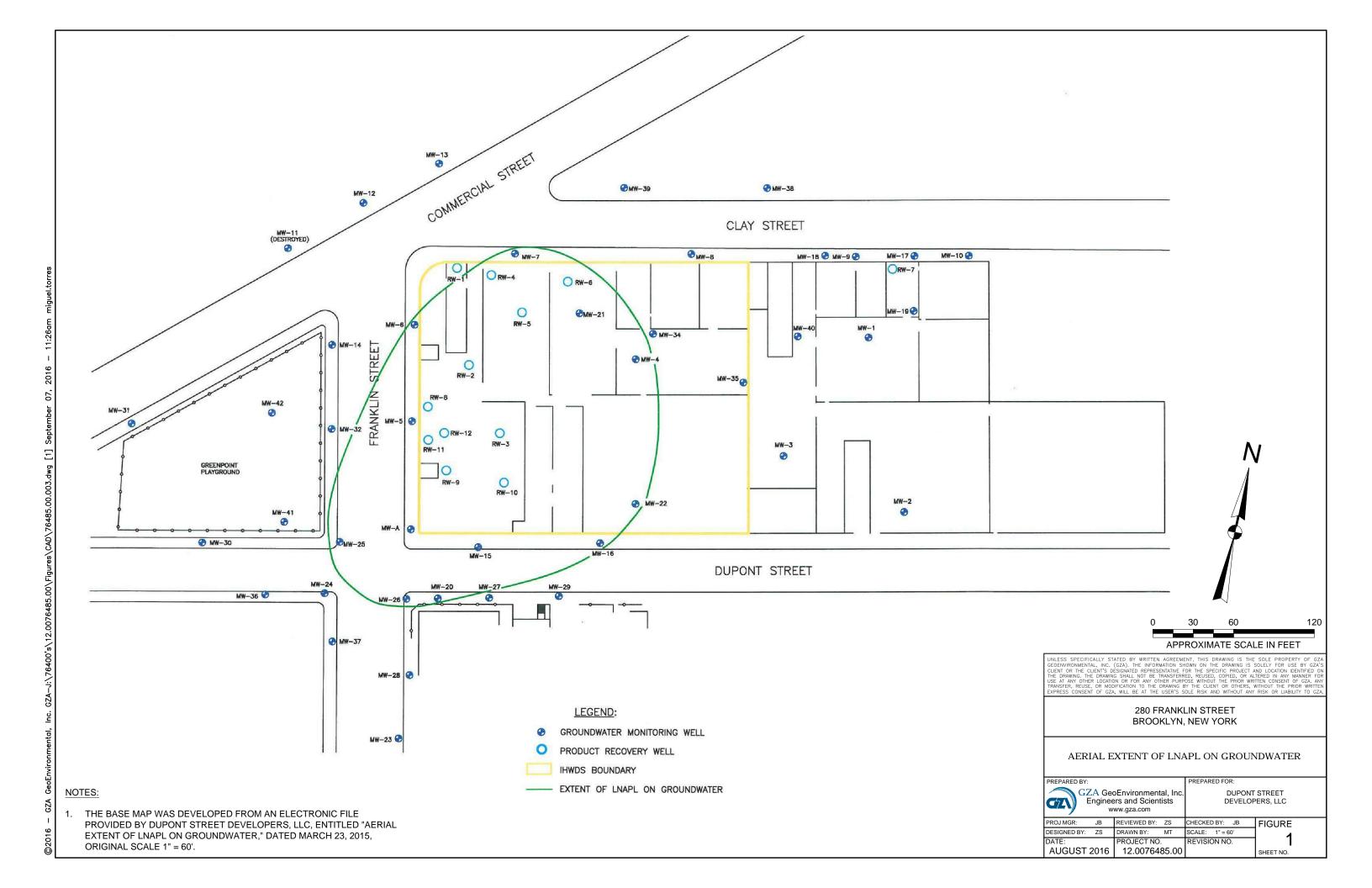
Wells were gauged on January 31, 2018

Well Number					2014									201	3						20	12	
	Sep-14	Aug-14	Jul-14	Jun-14	May-14	Apr-14	Mar-14	Feb-14	Jan-14	Dec-13	Nov-13	Oct-13	Sep-13	Aug-13	Jul-13	Apr-13	Mar-13	Feb-13	Jan-13	Dec-12	Nov-12	Oct-12	Sep-12
MW – 4	1.75	1.90	1.24	Trace	_	0.01	Trace	0.23	0.22	0.30	0.66	0.78	##	3.49	2.22	0.59	0.67	0.44	0.44	0.80	0.31	0.33	3.13
MW - 5	4.79	5.03	1.97	3.39	_	3.14	2.80	2.98	_	6.46	7.17	5.54	##	5.08	3.92	3.00	2.39	4.32	3.00	4.11	3.50	3.41	5.58
MW – 6	##	##	##	##	_		2.84	3.43	_	2.89	2.76	2.00	##	2.42	2.82	_	_	_	_			3.49	2.14
MW - 7	2.01	2.16	0.60	0.01	_	0.17	0.17	_	_	4.78	4.70	4.00	##	2.77	1.06	1.92	4.92	5.45	1.30	1.36	2.00	1.84	1.83
MW – 8	ND	ND	ND	ND	_	ND	ND		_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW – 12 MW – 13	ND ND	_	ND ND	ND ND	_	ND ND	ND ND	_	_	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
MW - 13	ND	ND	ND	ND	_	ND	ND	_	_	ND	ND	ND	ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 15	2.19	2.32	##	0.45	_	0.61	0.30	0.38	_	3.11	3.19	3.34	##	2.14	0.70	-	0.32	1.07	- ND	1.56	0.99	0.76	2.67
MW – 16	_	0.03	0.99	Trace	_	0.01	0.01	0.10	_	0.23	0.22	0.19	##	0.05	0.07	0.02	0.01	0.10	0.25	0.20	ND	0.24	0.20
MW – 20	1.87	1.71	2.92	2.06	_	1.47	2.90	2.58	4.19	5.07	4.90	4.11	##	3.33	1.37	3.32	1.20	1.10	1.35	1.38	3.39	3.15	3.80
MW - 21	3.62	4.64	4.90	1.99	_	2.69	2.47	2.48	3.37	3.13	3.72	4.66	##	4.37	3.66	3.38	3.43	3.75	4.10	4.23	2.89	2.04	4.15
MW – 22	1.03	1.02	0.54	0.85	_	0.74	0.86	0.75	1.22	1.07	0.69	0.50	##	1.12	0.86	0.50	0.62	1.15	1.20	0.18	0.21	0.18	1.80
MW - 23	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW – 24	ND	ND	ND	ND	_	ND	ND	_	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW – 25	3.16	4.02	3.65	3.48	_	3.91	3.75	_	_	5.66	5.56	4.01	##	4.41	3.58	3.96	3.96	4.34	3.70	2.82	7.86	4.40	3.96
MW – 26	3.84	3.70	4.50	3.02	_	2.71	3.48	3.80	4.34	4.44	4.47	4.62	##	4.18	3.69	2.86	2.33	1.00	2.45	1.62	-	2.61	4.02
MW – 27	ND	ND	ND	ND	_	ND	ND		_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.99	ND	ND
MW – 28	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI
MW – 29	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI
MW - 30	ND	ND ND	ND ND	ND	_	ND ND	ND ND	_	_	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW – 31 MW – 32	ND ND	ND	ND	ND ND	_	ND	ND	_	_	ND ND	ND ND	ND ND	ND ND	ND ND	NI NI	NI NI	NI NI	NI NI	NI NI	NI NI	NI NI	NI NI	NI NI
MW - 34	ND ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND ND	ND	NI NI	NI NI	NI NI	NI	NI	NI	NI	NI	NI NI
MW - 35	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW – 36	ND	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW - 37	ND	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW – 38	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW – 39	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW – 40	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW – 41	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW – 42	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
RW – 1	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND
RW – 2	4.52	4.53	4.52	0.11	_	1.30	3.05	2.31	2.80	3.19	5.09	3.86	##	4.07	2.96	2.92	3.48	3.75	4.20	2.52	1.92	1.50	5.85
RW - 3	3.50	3.45 2.88	3.56	4.12 2.86	_	1.58	2.90	2.28	4.60 (est)	3.60	3.33 2.30	1.68	##	2.96	1.44	3.90	3.20	3.34	3.70	3.58	2.84	3.50	3.88
RW – 4 RW – 5	2.78 0.85	0.43	0.17	0.17	_	0.12	3.25 0.93	0.43	2.45 0.52	2.67 0.60	0.79	1.46 0.54	##	2.75 0.69	0.51	3.06 2.62	3.15	3.00	3.05	2.95	3.00	3.45 1.88	3.35
RW - 5	0.85	0.43	0.17	0.17	_	0.12	1.28	0.43	0.52	0.60	1.30	0.54	##	0.69	0.51	0.45	0.50	0.21	0.40	0.15	0.90	0.22	0.06
RW - 8 **	4.01	4.48	##	2.95	_	0.45	1.47	0.86	2.37	2.46	3.92	4.13	##	4.59	3.64	0.43	0.50	0.21	0.40	0.13	0.90	0.22	-
RW - 9	4.81	4.59	4.92	4.14	_	1.02	2.90	2.71	4.34	5.25	4.88	3.08	##	4.09	2.37	4.40	2.62	3.11	3.50	3.08	3.83	2.98	5.33
RW - 10	3.93	3.74	3.57	3.18	_	3.38	3.89	3.48	3.80	3.81	3.99	4.11	##	4.11	3.55	_	_	_	_	_	_	_	_
RW - 11	4.43	4.42	4.46	3.87	_	2.03	2.54	2.59	3.66	4.27	5.48	2.65	##	3.91	3.49	3.15	2.67	3.11	3.50	2.93	4.49	2.58	4.40
RW-12 **	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Data Recorded usin
## = :LNAPL obser
NI = Not Installed
ND = Not Detected
Wells MW-1, MW-

Well-34 has unever est= Estimated Val \* = Well was dry \*\* = Well equipped

\_= Data not recor Wells were gauged





GEOTECHNICAL

ENVIRONMENTA

ECOLOGICAL

WATER

CONSTRUCTION MANAGEMENT

GZA GeoEnvironmental of NY 104 West 29th Street 10th Floor New York, NY 10001 T: 212.594.8140 F: 212.279.8180 www.gza.com



March 13, 2018 File No. 12.0076485.00

Via email: yukyin.wong@dec.ny.gov Mr. Bryan Wong New York State Department of Environmental Conservation Division of Environmental Remediation, Region 2 47-40 21<sup>st</sup> Street Long Island City, New York 11101

Re: Project Status Report

Former NuHart Plastic Manufacturing Site # 224136

280 Franklin Street Brooklyn, New York

Dear Mr. Wong:

Goldberg Zoino and Associates of New York, PC d/b/a GZA GeoEnvironmental of New York is transmitting this Project Status Report on behalf of Dupont Street Developers, LLC for the above referenced Site. Copies of this Project Status Report have also been provided to Dawn Hettrick of the New York State Department of Health. The Project Status Report is for January 2018 to February 2018. If you have any questions, please contact us at 973-774-3302 or 973-774-3307.

Sincerely,

GZA GeoEnvironmental of New York,

Steven Roland, P.E.

Senior Consultant

David M. Winslow, Ph.D., P.G.

Principal

Ernest R. Hanna, P.E. Consultant Reviewer

Cc:

Dawn Hettrick (NYSDOH)
Dupont Street Developers, LLC
Joseph Brunner

Jane O'Connell (NYSDEC)

Wendy A. Marsh

Email: dawn.hettrick@health.ny.gov

Email: bojinzhu@gmail.com Email: yb321@yahoo.com

Email: jane.oconnell@dec.ny.gov Email: wmarsh@hancocklaw.com



GEOTECHNICAL

ECOLOGICAL

WATER

CONSTRUCTION MANAGEMENT

GZA GeoEnvironmental of NY 104 West 29th Street 10th Floor New York, NY 10001 T: 212.594.8140 F: 212.279.8180 www.gza.com



This status report summarizes activities conducted at the Former NuHart Plastic Manufacturing Site (Site) in February 2018. Activities during this period were conducted by GZA GeoEnvironmental, of New York. (GZA). GZA representatives also participated in Site evaluations and communications, and additional activities were conducted by others, as noted below. A Site Plan showing the general Site layout, nearby area, and associated wells is included as Figure 1. Schedule information is presented under each activity discussion.

Interim remedial measure (IRM) activities for monitoring and removal of light non-aqueous-phase liquid (LNAPL) at the Site were performed during the monitoring period in general conformance with the NYSDEC-approved Operation, Maintenance and Monitoring Plan (OM&M Plan) for the product recovery system. Investigation activities for the Site were previously completed as documented in previous project status reports and are not discussed herein.

#### Interim Remedial Measure Activities

Monthly IRM routine activities were conducted by GZA on February 27th, 2018. A table documenting the apparent LNAPL thickness measurements is provided as Attachment A and a Well Location Map showing the extent of LNAPL based on the monitoring date is provided as **Figure 1**.

#### **Maintenance Activities**

General maintenance activities were performed, including collection of spent IRM-related absorbent materials in the vicinity of recovery wells, placing new absorbent materials as needed to contain LNAPL, and proper labeling of waste containers used during this IRM event. On February 27, 2018, Miller Environmental Group, Inc (Miller) replaced the belt associated with the recovery system RW-8. The RW-8 was powered on immediately after the repair. Both recovery systems were observed to be functioning appropriately following the repair. DEC was advised via email that the system was now operational.

#### Monitoring and LNAPL Removal

Gauging of onsite and offsite monitoring and recovery wells associated with the Site was conducted on February 27th, 2018. Well gauging was conducted from 7:55 am to 14:30 pm. Flood tides were observed with high tide at 7:05 am and Low tide at 1:17 pm. (ref. NOAA/NOS/CO-OPS Station ID (8517673) Hunters Point, Newtown Creek, NY). The wells that could not be accessed are noted on **Attachment A**. All wells containing LNAPL are noted, as are wells where LNAPL is absent. No changes were noted in the horizontal extent of the LNAPL. The depths to the water table were variable relative to the depths noted in the January 2018 status report, with some wells showing increases and some wells showing decreases. LNAPL apparent thicknesses were also variable, with increases generally noted in wells where the depth to water increased and decreases noted in wells where the depth to water decreased.

The skimmer holding cells were emptied during this event. The amount of LNAPL removed from the wells was estimated at 48 gallons, including LNAPL from the drums associated with the skimmers on recovery well RW-12. Based on previous LNAPL estimates, an estimated



March 13, 2017 File No. 12.0076485.00 Former NuHart Plastic Manufacturing Site Page | 3

2,815 gallons of product have been removed from the subsurface since early 2015, with most of the LNAPL disposed. The removed LNAPL is stored in intermediate bulk container (IBC) tanks located in the Site building, pending pickup and offsite disposal. When the IBC tanks are nearly full and/or the containerized spent absorbent materials require disposal, the designated waste management company will be contacted and waste disposal requested.

Eastern Environmental Solutions, Inc. (Eastern) is presently contracted to conduct waste management activities for disposal of product from the IBC tanks at the Site. Waste removal was conducted on August 11, 2017 and included removal of approximate 500 gallons of product for proper offsite disposal. To-date, Eastern has transported and disposed an estimated 2,616 gallons of product at the Cycle Chem facility in Elizabeth, NJ as hazardous waste. Waste transport and disposal information will continue to be included in the progress reports following the months during which waste disposal activities occur.

Langan performed the next phase of construction at the nearby Greenpoint Landing project and proposed dewatering activities similar that conducted in 2016. GZA reviewed information provided by Langan for GW dewatering adjacent to the NuHart site and has provided input on monitoring to be conducted during construction.

# **Feasibility Study**

GZA submitted a Thermal Treatability and In-Situ Chemical Oxidation Study Work Plan to NYSDEC on May 22<sup>nd</sup>, 2017. The NYSDEC provided the comments regarding this work plan on July 7<sup>th</sup>, 2017. GZA have collected the pilot study samples on September 20<sup>st</sup> through September 22<sup>nd</sup>, and October 3<sup>rd</sup>, 2017. Upon the completion of the thermal portion of the pilot study, GZA prepared a memo to summarize the thermal portion of the treatability study and submitted to NYSDEC on January 19<sup>th</sup>, 2018. The chemical oxidization portion of the pilot study is completed. The final summary memo which include the chemical oxidation results was submitted to NYSDEC on March 13, 2018.

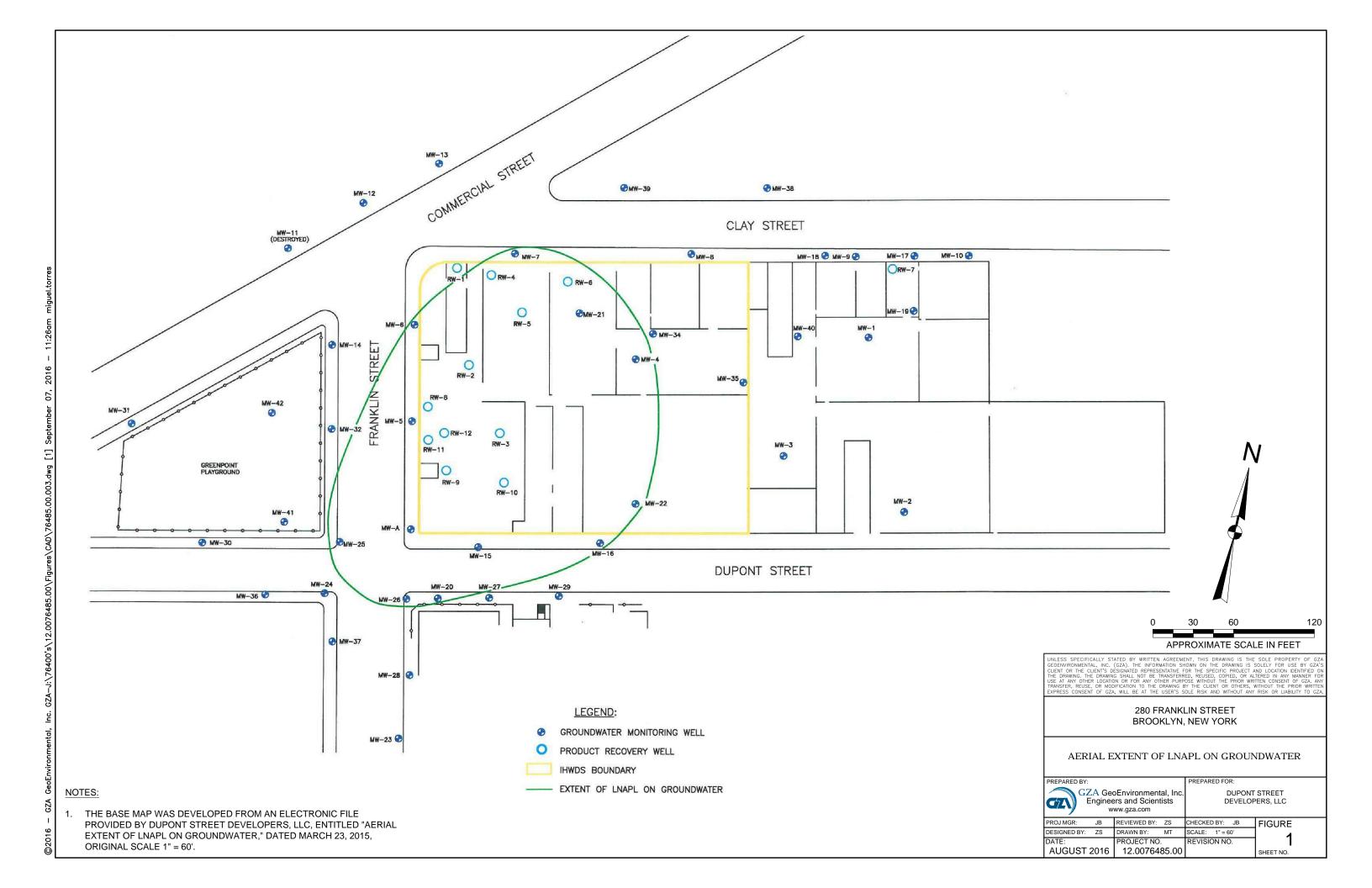
#### Site Soil Management Report

Pursuant to a request by the NYSDEC, GZA prepared the Site Soil Management Plan (SSMP) on October 28, 2016 to provide guidance for utility contractors regarding management for soils and groundwater potentially impacted by the Site. SSMP was followed during the pilot study sampling event.

#### Attachments

Attachment A – Apparent Thickness of LNAPL

Figure 1 – Well Location Map showing areal extent of LNAPL on groundwater



Readings taken 2/27/18 between 7:55 am and 14:30 pm (high tide @ 8.24 am and Low tide @ 3:01 pm)

		: @ 3:01 pm)																							A 10	parent Thic	almoss of I	NADI (foo
Well Number	*Depth to	*Depth to Water	2018	•	I					2017						I					2016				Ар	parent Tinc	KHESS OF LE	NAFL (leet
weii Number	Product (feet)	(feet)			N 15	0.15	6 15				L 15		T 37 17	E 1 15	7 15	D 16	N 16	0.116	6 16			T 16		1 16	34 46	E1 16	T 16	Dec-15
2000	1775	1775	Feb-18	Jan-18	Nov-17	Oct-17	Sep-17	Aug-17	Jul-17	Jun-17	May-17	Apr-17	Mar-17	Feb-17	Jan-17	Dec-16	Nov-16	Oct-16	Sep-16	Aug-16	Jul-16		May-16		Mar-16			
MW – 4	ND	ND	ND*	0.92	2.12	0.81	1.76	1.73	1.23	1.77	ND*	1.32	1.61	1.13	1.31	1.30	1.00	1.18	1.35	1.71	1.73	1.80	1.53	1.73	1.43	1.85	1.77	1.96
MW - 5	10.26	12.47	2.21	4.65	5.83	2.19	4.44	4.4	3.71	3.54	2.81	2.80	3.13	4.05	3.00	3.55	4.43	3.64	3.22	4.31	4.03	4.29	3.07	3.18	3.14	1.85	3.24	4.83
MW – 6	9.27	ND	##	##	##	1.22	3.19	3.15	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##
MW – 7	9.37	11.92	2.55	3.32	4.91	1.48	1.45	1.41	0.9	0.00	1.50	1.92	2.53	3.71	1.28	0.78	1.73	0.91	0.04	1.89	1.58	2.22	2.11	1.90	1.66	2.31	2.47	3.44
MW – 8	ND	10.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW – 12	ND	6.52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_	_	_	ND
MW – 13	ND	8.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_	_	ND
MW – 14	ND	8.94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW – 15	10.91	10.99	0.08	3.16	1.78	0.31	0.29	0.26	0.26	0.24	0.12	0.22	0.28	0.40	0.31	0.20	0.80	0.20	0.17	0.81	0.07	0.48	0.22	0.71	0.03	0.04	0.60	3.08
MW - 16	11.6	11.7	0.1	0.34	0.25	0.35	0.37	0.35	0.08	0.28	0.03	0.10	0.23	0.20	0.31	ND	ND	ND	ND	ND	0.01	0.25	0.02	0.01	0.02	0.16	0.02	0.11
MW - 20	11.91	12.93	1.02	3.15	3.99	2.52	2.58	2.63	2.9	2.83	2.61	2.94	2.33	3.02	3.02	2.88	3.28	2.90	3.16	2.89	2.88	2.85	2.22	2.49	2.43	1.99	2.46	3.52
MW - 21	11.80	14.09	2.29	3.83	4.79	3.26	3.35	2.13	1.45	2.75	3.31	3.30	3.04	3.62	7.59	3.27	3.32	1.25	2.39	3.61	2.96	2.95	2.63	4.18	2.68	2.42	2.97	4.46
MW – 22	12.55	12.83	0.28	0.37	1.77	1.25	1.24	1.21	0.75	0.66	0.66	0.78	0.64	0.65	0.50	0.51	0.38	0.30	0.01	0.51	0.87	0.62	0.45	0.48	0.44	0.15	0.22	1.33
MW – 23	ND	11.55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW – 24	ND	10.72	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW – 25	10.51	13.95	3.44	3.66	4.54	4.03	4.05	4.02	3.73	4.09	3.85	3.70	3.74	3.47	3.89	3.62	3.60	4.20	3.79	3.65	4.01	3.75	3.55	3.33	3.42	3.32	3.43	3.68
MW – 26	10.56	13.75	3.19	3.95	5.59	3.81	3.82	3.79	3.65	3.42	3.29	3.73	3.64	3.24	3.14	3.20	3.56	4.00	3.28	4.26	3.58	3.82	3.41	3.37	2.97	3.82	3.41	4.23
MW – 27	ND	10.97	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW – 28	ND	11.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW – 29	ND	11.52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 30	ND	10.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW – 31	ND	9.47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_	_	_	_	_	ND	ND	ND	ND	ND	ND	ND	ND
MW – 32	ND	10.17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW – 34	ND	11.80	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW – 35	ND	14.81	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 36	ND	10.98	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 37	ND	11.41	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 38	ND	9.75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	- ND	- ND		ND	ND	ND	ND	ND	ND	ND	ND
MW - 39	ND ND	8.78	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND ND	ND ND	ND	ND	ND ND	ND	ND ND	ND ND	ND	ND						
MW - 40	ND	7.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND ND	ND	ND ND	ND ND	ND ND	ND	ND	ND ND	ND	ND	ND	ND ND	ND	ND ND	ND ND	ND	ND
MW - 41	ND ND	10.09	ND ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND
-				ND	ND ND	ND ND	ND ND	ND ND	ND ND			<u> </u>	_								ND				ND ND			ND
MW - 42	ND	9.34	ND							ND		ND	ND	ND		ND	ND											
RW - 1	ND	9.05	ND	ND 4.01	ND 5.10	ND 0.56	ND	ND	ND	ND	ND	ND	ND	ND														
RW – 2	12.31	17.83	5.52	4.01	5.19	0.56	0.58	0.53	6.09	6.25	0.42	1.13	2.90	3.09	3.53	1.65	1.18	1.26	1.35	1.88	2.05	2.41	3.02	2.12	3.34	2.70	2.83	4.28
RW – 3	15.37	18.4	3.03	ND	3.31	3.17	3.15	3.22	2.28	3.44	2.85	2.71	3.46	2.98	3.10	1.91	3.95	2.40	2.50	3.08	1.97	2.49	1.64	2.17	2.09	1.64	2.37	4.27
RW – 4	12.47	14.86	2.39	3.06	4.32	4.33	4.17	4.18	3.1	4.1	03.69	3.65	3.69	3.67	3.05	3.80	2.80	2.77	3.30	2.73	2.65	2.32	2.02	2.22	2.93	2.03	2.51	2.82
RW - 5	11.87	16.51	4.64	0.49	4.49	5.28	5.27	5.26	5.42	3.75	5.00	5.44	5.10	0.70	2.95	1.55	3.05	0.42	0.36	0.50	4.97	2.76	2.47	2.66	3.21	2.53	1.92	1.96
RW - 6	12.25	13.15	0.9	2.61	1.64	0.73	0.6	1.61	0.93	5.35	1.05	1.27	1.22	0.90	0.90	0.85	0.68	0.87	0.92	1.46	1.29	0.81	0.67	0.73	0.74	0.76	0.74	0.77
RW - 8 **	14.24	15.2	0.96	1.99	_	1.15	2.2	3.62	1.2	2.34	0.02	0.01	_	_	_				_	_			_		_		'	
RW - 9	13.73	16.61	2.88	4.32	5.58	3.72	3.77	3.69	2.84	3.25	2.70	2.69	3.50	3.66	2.47	3.09	3.57	2.45	2.35	3.19	2.15	3.18	2.75	3.09	3.81	2.42	3.46	4.62
RW - 10	13.42	16.90	3.48	4.64	4.28	3.65	3.67	3.71	3.67	3.78	4.07	3.79	4.27	4.70	4.15	3.86	3.45	3.80	3.36	4.44	3.91	3.69	3.74	3.66	3.67	4.69	4.77	4.46
RW - 11	13.75	16.25	2.5	5.01	5.5	2.97	4.57	3.93	2.33	3.00	2.92	3.00	3.55	3.73	2.65	1.90	2.04	2.43	2.12	3.66	2.98	3.43	3.08	2.94	3.05	2.45	3.07	4.65
RW- 12 **	13.36	14.48	1.12	1.5	5.96	3.65	5.4	2.68	0.01	0.03	0.01	0.02	0.80	3.89	_	_	_	_	_	-	_	_	_	_				

#### Notes

Data Recorded using an oil/water interface probe, measurements from the tops of well casings

## = :LNAPL observed, apparent thickness not determinded

NI = Not Installed

ND = Not Detected

Wells MW-1, MW-2, MW-9, MW-10, MW-17, MW-18, MW-19, and RW-7 are associated with NYSDEC Spill 06-01852 and are under a separate investigation

Well-34 has uneven casting top

est= Estimated Value

\* = Well was dry

\*\* = Well equipped with automated product recovery system

\_\_= Data not recorded due to access issues

Wells were gauged on February 27, 2018

Well Number					2015										2014									201	3						20	12	
	Nov-15	Oct-15	Sep-15	Aug-15	Jul-15	Jun-15	May-15	Apr-15	Mar-15	Jan-15	Sep-14	Aug-14	Jul-14	Jun-14	May-14	Apr-14	Mar-14	Feb-14	Jan-14	Dec-13	Nov-13	Oct-13	Sep-13	Aug-13	Jul-13	Apr-13	Mar-13	Feb-13	Jan-13	Dec-12	Nov-12	Oct-12	Sep-12
MW – 4	2.04	1.99	1.77	2.22	4.27	0.35	0.44	_	0.56	-	1.75	1.90	1.24	Trace	_	0.01	Trace	0.23	0.22	0.30	0.66	0.78	##	3.49	2.22	0.59	0.67	0.44	0.44	0.80	0.31	0.33	3.13
MW - 5	5.41	4.16	4.26	4.45	4.22	2.30	2.41	2.55	3.10	4.40	4.79	5.03	1.97	3.39	_	3.14	2.80	2.98	_	6.46	7.17	5.54	##	5.08	3.92	3.00	2.39	4.32	3.00	4.11	3.50	3.41	5.58
MW – 6	##	##	##	##	##	2.30	##	##	##	##	##	##	##	##	_	_	2.84	3.43	_	2.89	2.76	2.00	##	2.42	2.82	_	_	-	_	_	_	3.49	2.14
MW – 7	3.31	2.58	1.46	1.28	0.99	1.58	ND	1.94	1.79	##	2.01	2.16	0.60	0.01	_	0.17	0.17	_		4.78	4.70	4.00	##	2.77	1.06	1.92	4.92	5.45	1.30	1.36	2.00	1.84	1.83
MW – 8	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	_	ND	ND		_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW – 12 MW – 13	ND	_	_	_	_	ND ND	ND	ND ND	ND		ND	_	ND ND	ND	_	ND ND	ND	_		ND ND	ND ND	ND	ND ND	ND ND	ND	ND	ND	ND	ND ND	ND	ND	ND	ND
MW – 13	ND ND	ND	ND	ND	ND	ND	ND ND	ND ND	ND ND	ND	ND ND	- ND	ND	ND ND	_	ND	ND ND	_	_	ND ND	ND	ND ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND
MW - 15	3.07	1.97	1.05	1.05	ND	1.24	1.21	1.56	1.67	1.71	2.19	2.32	##	0.45	_	0.61	0.30	0.38		3.11	3.19	3.34	##	2.14	0.70	-	0.32	1.07	- ND	1.56	0.99	0.76	2.67
MW - 16	0.02	0.12	0.05	0.05	0.14	0.13	0.15	0.03	0.08	0.02		0.03	0.99	Trace		0.01	0.01	0.10	_	0.23	0.22	0.19	##	0.05	0.07	0.02	0.01	0.10	0.25	0.20	ND	0.24	0.20
MW - 20	3.02	3.33	3.25	3.12	2.88	2.58	2.79	3.84	4.38	5.13	1.87	1.71	2.92	2.06	_	1.47	2.90	2.58	4.19	5.07	4.90	4.11	##	3.33	1.37	3.32	1.20	1.10	1.35	1.38	3.39	3.15	3.80
MW – 21	3.85	4.51	3.63	3.32	2.97	2.53	2.77	2.98	3.46	3.23	3.62	4.64	4.90	1.99	_	2.69	2.47	2.48	3.37	3.13	3.72	4.66	##	4.37	3.66	3.38	3.43	3.75	4.10	4.23	2.89	2.04	4.15
MW - 22	1.01	0.49	1.17	1.04	0.79	0.86	0.84	0.74	1.33	1.27	1.03	1.02	0.54	0.85	_	0.74	0.86	0.75	1.22	1.07	0.69	0.50	##	1.12	0.86	0.50	0.62	1.15	1.20	0.18	0.21	0.18	1.80
MW - 23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_	ND	ND	_	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW – 25	3.53	3.63	3.53	3.68	3.53	2.81	3.24	3.36	1.07	1.03	3.16	4.02	3.65	3.48	_	3.91	3.75	_	_	5.66	5.56	4.01	##	4.41	3.58	3.96	3.96	4.34	3.70	2.82	7.86	4.40	3.96
MW – 26	4.08	3.77	4.00	3.70	3.65	3.18	3.33	3.64	4.14	4.11	3.84	3.70	4.50	3.02	_	2.71	3.48	3.80	4.34	4.44	4.47	4.62	##	4.18	3.69	2.86	2.33	1.00	2.45	1.62	-	2.61	4.02
MW – 27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_	ND	ND	_	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.99	ND	ND
MW – 28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI
MW – 29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI
MW – 30 MW – 31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_	ND	ND	_	_	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI NI
MW – 31	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	_	ND ND	ND ND	_		ND ND	ND ND	ND ND	ND ND	ND ND	NI NI	NI NI	NI NI	NI NI	NI NI	NI NI	NI NI	NI NI	NI NI
MW - 34	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW - 35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW – 36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW - 37	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW - 38	ND	ND	ND	ND	ND	ND	ND	ND	ND	_	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW - 39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW - 40	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW - 41	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW - 42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
RW – 1	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND
RW – 2	_	2.64	2.97	3.41	5.54	5.28	5.44	2.82	4.19	4.52	4.52	4.53	4.52	0.11	_	1.30	3.05	2.31	2.80	3.19	5.09	3.86	##	4.07	2.96	2.92	3.48	3.75	4.20	2.52	1.92	1.50	5.85
RW - 3	2.92	4.14	1.39	2.14	4.31	2.23	2.23	1.81	3.28	3.41	3.50	3.45	3.56	4.12	_	1.58	2.90	2.28	4.60 (est)	3.60	3.33	1.68	##	2.96	1.44	3.90	3.20	3.34	3.70	3.58	2.84	3.50	3.88
RW-4	2.31	1.99	1.09	2.02	3.65	3.66	3.53	3.53	1.43	1.35	2.78	2.88	0.17	2.86	_	1.81	3.25	3.27	2.45	2.67	2.30	1.46	##	2.75	1.08	3.06	3.15	3.00	3.05	2.95	2.00	3.45	3.35
RW - 5 RW - 6	5.64 0.65	4.18	2.03 0.65	5.79 0.61	4.87 0.78	4.69	4.75 2.35	0.70	0.85	0.91	0.85	0.43	0.17	0.17		0.12	0.93 1.28	0.43	0.52	0.60	0.79	0.54	##	0.69	0.51	2.62	0.50	0.21	0.40	2.35 0.15	3.00 0.90	1.88 0.22	0.06
RW - 6	0.65	0.66	0.65	0.61	0.78	1.96	2.35	2.14	2.93	2.92	4.01	0.64 4.48	0.78	2.95	_	0.45	1.28	0.96	2.37	2.46	1.30 3.92	4.13	##	4.59	3.64	0.45	0.50	0.21	0.40	0.15	0.90	0.22	0.06
RW - 9	4.37	3.52	2.68	3.23	3.04	4.82	4.79	4.28	5.68	5.65	4.81	4.59	4.92	4.14		1.02	2.90	2.71	4.34	5.25	4.88	3.08	##	4.09	2.37	4.40	2.62	3.11	3.50	3.08	3.83	2.98	5.33
RW – 10	5.32	4.45	4.12	4.12	5.71	3.80	3.95	3.65	4.96	5.04	3.93	3.74	3.57	3.18	_	3.38	3.89	3.48	3.80	3.81	3.99	4.11	##	4.11	3.55	_	_	_	_	_	_	_	_
RW – 11	4.39	3.59	3.24	3.62	3.43	3.66	3.67	3.00	3.87	3.97	4.43	4.42	4.46	3.87	_	2.03	2.54	2.59	3.66	4.27	5.48	2.65	##	3.91	3.49	3.15	2.67	3.11	3.50	2.93	4.49	2.58	4.40
RW- 12 **	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

#### Notes

Data Recorded usir ## = :LNAPL obser NI = Not Installed

ND = Not Detected Wells MW-1, MW-

Well-34 has uneven est= Estimated Val

\* = Well was dry

\*\* = Well equipped

\_= Data not record
Wells were gauged



ENVIRONMENTAL

ECOLOGICAL

CONSTRUCTION MANAGEMENT

GZA GeoEnvironmental of NY 104 West 29th Street 10th Floor New York, NY 10001 T: 212.594.8140 F: 212.279.8180 www.gza.com



April 10, 2018 File No. 12.0076485.00

Via email: yukyin.wong@dec.ny.gov Mr. Bryan Wong New York State Department of Environmental Conservation Division of Environmental Remediation, Region 2 47-40 21<sup>st</sup> Street Long Island City, New York 11101

**Project Status Report** Re:

Former NuHart Plastic Manufacturing Site # 224136

280 Franklin Street Brooklyn, New York

Dear Mr. Wong:

Goldberg Zoino and Associates of New York, PC d/b/a GZA GeoEnvironmental of New York is transmitting this Project Status Report on behalf of Dupont Street Developers, LLC for the above referenced Site. Copies of this Project Status Report have also been provided to Dawn Hettrick of the New York State Department of Health. The Project Status Report is for February 2018 to March 2018. If you have any questions, please contact us at 973-774-3302 or 973-774-3307.

Sincerely,

GZA GeoEnvironmental of New York,

Steen J. Roland Steven Roland, P.E.

Senior Consultant

Principal

Ernest R. Hanna, P.E. Consultant Reviewer

Cc:

Dawn Hettrick (NYSDOH) Dupont Street Developers, LLC Joseph Brunner Jane O'Connell (NYSDEC)

Wendy A. Marsh

Email: dawn.hettrick@health.ny.gov

David M. Winslow, Ph.D., P.G.

Email: bojinzhu@gmail.com Email: yb321@yahoo.com

Email: jane.oconnell@dec.ny.gov Email: wmarsh@hancocklaw.com



GEOTECHNICAL

ENVIRONMENTAL

ECOLOGICAL

WATER

CONSTRUCTION MANAGEMENT

GZA GeoEnvironmental of NY 104 West 29th Street 10th Floor New York, NY 10001 T: 212.594.8140 F: 212.279.8180 www.gza.com



This status report summarizes activities conducted at the Former NuHart Plastic Manufacturing Site (Site) in March 2018. Activities during this period were conducted by GZA GeoEnvironmental, of New York. (GZA). GZA representatives also participated in Site evaluations and communications, and additional activities were conducted by others, as noted below. A Site Plan showing the general Site layout, nearby area, and associated wells is included as Figure 1. Schedule information is presented under each activity discussion.

Interim remedial measure (IRM) activities for monitoring and removal of light non-aqueous-phase liquid (LNAPL) at the Site were performed during the monitoring period in general conformance with the NYSDEC-approved Operation, Maintenance and Monitoring Plan (OM&M Plan) for the product recovery system. Investigation activities for the Site were previously completed as documented in previous project status reports and are not discussed herein.

#### **Interim Remedial Measure Activities**

Monthly IRM routine activities were conducted by GZA on March 27th, 2018. A table documenting the apparent LNAPL thickness measurements is provided as Attachment A and a Well Location Map showing the extent of LNAPL based on the monitoring date is provided as **Figure 1**.

# **Maintenance Activities**

General maintenance activities were performed, including collection of spent IRM-related absorbent materials in the vicinity of recovery wells, placing new absorbent materials as needed to contain LNAPL, and proper labeling of waste containers used during this IRM event. On February 27, 2018, Miller Environmental Group, Inc (Miller) replaced the skimmer belt associated with RW-8. Both recovery systems were functioning properly following the repair.

# Monitoring and LNAPL Removal

Gauging of onsite and offsite monitoring and recovery wells associated with the Site was conducted on March 27th, 2018. Well gauging was conducted from 7:55 am to 15:30 pm. Flood tides were observed with high tide at 6:28 am and Low tide at 12:53 pm. (ref. NOAA/NOS/CO-OPS Station ID (8517673) Hunters Point, Newtown Creek, NY). The wells that could not be accessed are noted on **Attachment A**. All wells containing LNAPL are noted, as are wells where LNAPL is absent. No changes were noted in the horizontal extent of the LNAPL. The depths to the water table were variable relative to the depths noted in the February 2018 status report, with some wells showing increases and some wells showing decreases. LNAPL apparent thicknesses were also variable, with increases generally noted in wells where the depth to water increased and decreases noted in wells where the depth to water decreased.

The skimmer holding tanks were emptied during this event. The amount of LNAPL removed was estimated at 41 gallons, consisting of LNAPL from recovery wells RW-12 (39 gallons) and RW-8 (2 gallons). Based on previous LNAPL estimates, an estimated 2,856 gallons of product have been removed from the subsurface since early 2015, with most of the LNAPL



disposed. The removed LNAPL is stored in intermediate bulk container (IBC) tanks located in the Site building, pending pickup and offsite disposal. When the IBC tanks are nearly full, and/or the containerized spent absorbent materials require disposal, the designated waste management company will be contacted and waste disposal requested.

Eastern Environmental Solutions, Inc. (Eastern) is presently contracted to conduct waste management activities for disposal of product from the IBC tanks at the Site. To date, Eastern has transported and disposed an estimated 2,616 gallons of product at the Cycle Chem facility in Elizabeth, NJ as hazardous waste. Waste transport and disposal information will continue to be included in the progress reports following the months during which waste disposal activities occur.

# Feasibility Study

GZA submitted a final memo to summarize both the thermal/chemical oxidation portions of the treatability study and submitted to NYSDEC on March 13<sup>th</sup>, 2018.

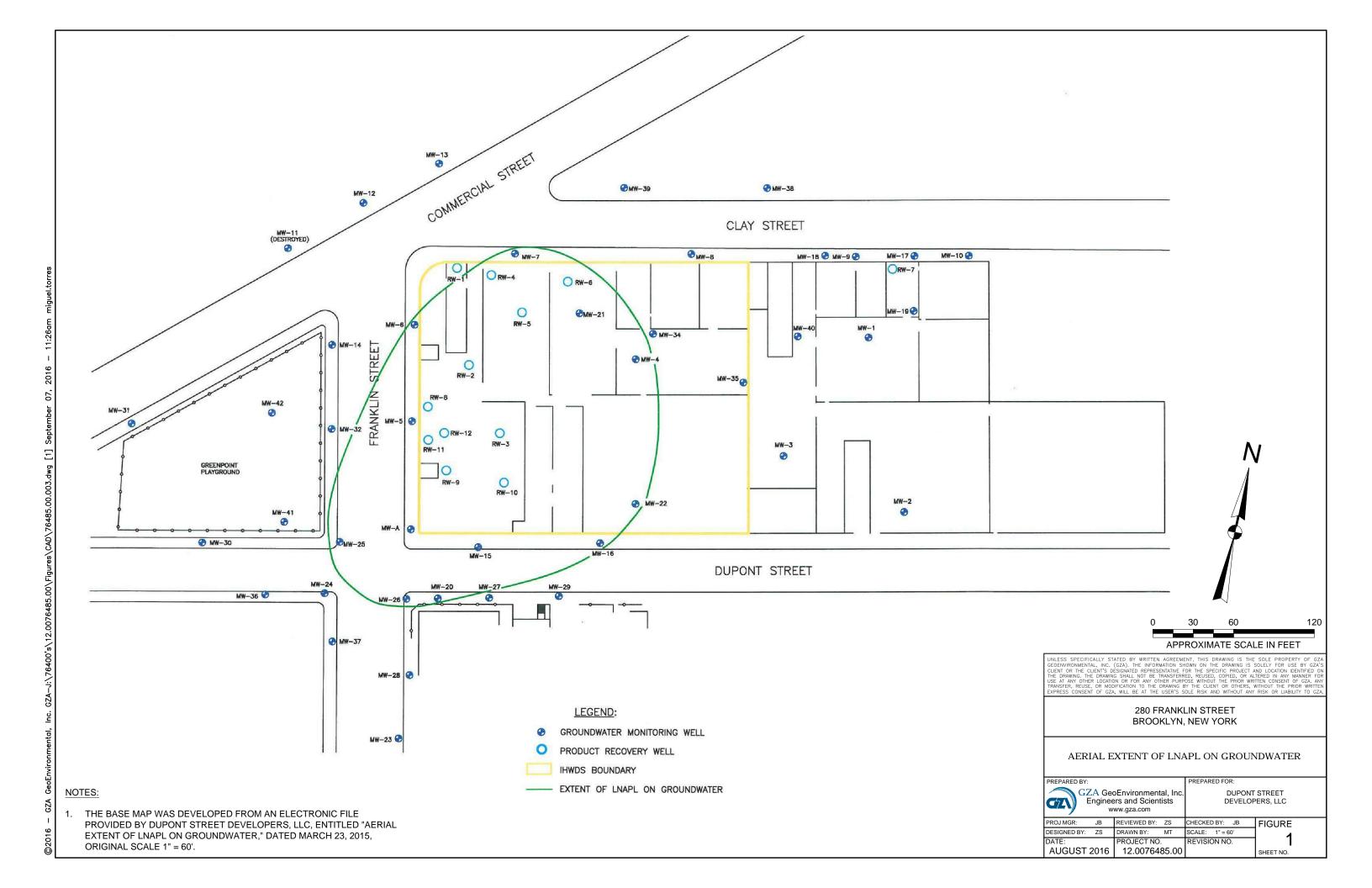
# Site Soil Management Report

Pursuant to a request by the NYSDEC, GZA prepared the Site Soil Management Plan (SSMP) on October 28, 2016 to provide guidance for utility contractors regarding management for soils and groundwater potentially impacted by the Site. SSMP was followed during the pilot study sampling event.

#### **Attachments**

Attachment A – Apparent Thickness of LNAPL

Figure 1 – Well Location Map showing areal extent of LNAPL on groundwater



Readings taken 3/27/18 between 7:55 am and 15:30 pm (High tide @ 6:28 am and Low tide @ 12:53 pm)

	ana Low tiac	@ 12:53 pm)																								
	*Depth to	*Depth to Water															_								App	arent Thickness of L
Well Number	Product (feet)	(feet)		2018							2017											2016				
			Mar-18	Feb-18	Jan-18	Nov-17	Oct-17	Sep-17	Aug-17	Jul-17	Jun-17	May-17	Apr-17	Mar-17	Feb-17	Jan-17	Dec-16	Nov-16	Oct-16	Sep-16	Aug-16	Jul-16			Apr-16	Mar-16 Feb-16
MW-4	10.42	11.15	0.73	*	0.92	2.12	0.81	1.76	1.73	1.23	1.77	ND*	1.32	1.61	1.13	1.31	1.30	1.00	1.18	1.35	1.71	1.73	1.80	1.53	1.73	1.43 1.85
MW - 5	9.22	11.41	2.19	2.21	4.65	5.83	2.19	4.44	4.4	3.71	3.54	2.81	2.80	3.13	4.05	3.00	3.55	4.43	3.64	3.22	4.31	4.03	4.29	3.07	3.18	3.14 1.85
MW – 6	8.22	8.96	0.74	##	##	##	1.22	3.19	3.15	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	## ##
MW-7	8.47	10.50	2.03	2.55	3.32	4.91	1.48	1.45	1.41	0.9	0.00	1.50	1.92	2.53	3.71	1.28	0.78	1.73	0.91	0.04	1.89	1.58	2.22	2.11	1.90	1.66 2.31
MW - 8	ND	9.02	ND	ND	ND	ND	ND ND																			
MW - 12	ND	5.95	ND	ND	ND	ND																				
MW – 13	ND	7.08	ND	ND	ND	ND	ND —																			
MW – 14	ND	8.05	ND	ND	ND	ND	ND ND																			
MW – 15	9.86	9.93	0.07	0.08	3.16	1.78	0.31	0.29	0.26	0.26	0.24	0.12	0.22	0.28	0.40	0.31	0.20	0.80	0.20	0.17	0.81	0.07	0.48	0.22	0.71	0.03 0.04
MW – 16			_	0.1	0.34	0.25	0.35	0.37	0.35	0.08	0.28	0.03	0.10	0.23	0.20	0.31	ND	ND	ND	ND	ND	0.01	0.25	0.02	0.01	0.02 0.16
MW - 20	9.98	11.75	1.77	1.02	3.15	3.99	2.52	2.58	2.63	2.9	2.83	2.61	2.94	2.33	3.02	3.02	2.88	3.28	2.90	3.16	2.89	2.88	2.85	2.22	2.49	2.43 1.99
MW - 21	10.70	12.08	1.38	2.29	3.83	4.79	3.26	3.35	2.13	1.45	2.75	3.31	3.30	3.04	3.62	7.59	3.27	3.32	1.25	2.39	3.61	2.96	2.95	2.63	4.18	2.68 2.42
MW – 22	11.47	12.58	1.11	0.28	0.37	1.77	1.25	1.24	1.21	0.75	0.66	0.66	0.78	0.64	0.65	0.50	0.51	0.38	0.30	0.01	0.51	0.87	0.62	0.45	0.48	0.44 0.15
MW – 23	ND	10.55	ND	ND	ND	ND	ND ND																			
MW – 24	ND	9.79	ND	ND	ND	ND	ND ND																			
MW – 25	9.51	12.96	3.45	3.44	3.66	4.54	4.03	4.05	4.02	3.73	4.09	3.85	3.70	3.74	3.47	3.89	3.62	3.60	4.20	3.79	3.65	4.01	3.75	3.55	3.33	3.42 3.32
MW – 26	9.60	12.08	2.48	3.19	3.95	5.59	3.81	3.82	3.79	3.65	3.42	3.29	3.73	3.64	3.24	3.14	3.20	3.56	4.00	3.28	4.26	3.58	3.82	3.41	3.37	2.97 3.82
MW – 27	ND	09.95	ND	ND	ND	ND	ND ND																			
MW – 28	ND	10.32	ND	ND	ND	ND	ND ND																			
MW – 29	ND	10.48	ND	ND	ND	ND	ND ND																			
MW - 30	ND	9.19	ND	ND	ND	ND	ND ND																			
MW – 31	ND	8.6	ND	_	_		_		ND	ND	ND	ND	ND ND													
MW - 32	ND	9.22	ND	ND	ND	ND	ND ND																			
MW – 34	ND	10.78	ND	ND	ND	ND	ND ND																			
MW – 35	ND	13.76	ND	ND	ND	ND	ND ND																			
MW - 36	ND	10.03	ND	ND	ND	ND	ND ND																			
MW – 37	ND	10.50	ND	ND	ND	ND	ND ND																			
MW – 38	ND	7.43	ND	_	_		_		ND	ND	ND	ND	ND ND													
MW – 39	ND	7.90	ND	ND	ND	ND	ND ND																			
MW – 40	ND	6.26	ND	ND	ND	ND	ND ND																			
MW – 41	ND	9.15	ND	ND	ND	ND	ND ND																			
MW – 42	ND	8.42	ND	ND	ND	ND	ND ND																			
RW – 1	ND	8.12	ND	ND	ND	ND	ND ND																			
RW – 2	11.40	11.48	0.08	5.52	4.01	5.19	0.56	0.58	0.53	6.09	6.25	0.42	1.13	2.90	3.09	3.53	1.65	1.18	1.26	1.35	1.88	2.05	2.41	3.02	2.12	3.34 2.70
RW – 3	14.48	16.6	2.12	3.03	ND	3.31	3.17	3.15	3.22	2.28	3.44	2.85	2.71	3.46	2.98	3.10	1.91	3.95	2.40	2.50	3.08	1.97	2.49	1.64	2.17	2.09 1.64
RW - 4	11.50	14.51	3.01	02.39	3.06	4.32	4.33	4.17	4.18	3.1	4.1	03.69	3.65	3.69	3.67	3.05	3.80	2.80	2.77	3.30	2.73	2.65	2.32	2.02	2.22	2.93 2.03
RW – 5	10.98	11.32	0.34	4.64	0.49	4.49	5.28	5.27	5.26	5.42	3.75	5.00	5.44	5.10	0.70	2.95	1.55	3.05	0.42	0.36	0.50	4.97	2.76	2.47	2.66	3.21 2.53
RW - 6	11.30	12.21	0.91	00.90	2.61	1.64	0.73	0.6	1.61	0.93	5.35	1.05	1.27	1.22	0.90	0.90	0.85	0.68	0.42	0.92	1.46	1.29	0.81	0.67	0.73	0.74 0.76
RW - 8 **	13.3	13.33	0.03	0.96	1.99	-	1.15	2.2	3.62	1.2	2.34	0.02	0.01	-	- 0.90	-	0.03	- 0.00	- 0.87	0.92	1.40	1.2)	0.01	0.07	0.73	
RW – 9	12.80	14.31	1.51	2.88	4.32	5.58	3.72	3.77	3.69	2.84	3.25	2.70	2.69	3.50	3.66	2.47	3.09	3.57	2.45	2.35	3.19	2.15	3.18	2.75	3.09	3.81 2.42
RW – 10	12.45	13.11	0.66	3.48	4.64	4.28	3.65	3.67	3.71	3.67	3.78	4.07	3.79	4.27	4.70	4.15	3.86	3.45	3.80	3.36	4.44	3.91	3.69	3.74	3.66	3.67 4.69
RW - 10	12.79	15.20	2.41	2.50	5.01	5.5	2.97	4.57	3.93	2.33	3.00	2.92	3.00	3.55	3.73	2.65	1.90	2.04	2.43	2.12	3.66	2.98	3.43	3.08	2.94	3.05 2.45
RW-11 RW-12 **	12.4	12.42	0.02	1.12	1.5	5.96	3.65	5.4	2.68	0.01	0.03	0.01	0.02	0.80	3.73	2.03	1.90	2.04	2.43	2.12	3.00	2.90	3.43	3.00	2.74	3.03 2.43
KW-12 ***	12.4	12.42	0.02	1.12	1.5	3.90	3.03	3.4	2.08	0.01	0.03	0.01	0.02	0.80	3.89	_						_		_		

#### Notes

Data Recorded using an oil/water interface probe, measurements from the tops of well casings

## = :LNAPL observed, apparent thickness not determinded

NI = Not Installed

ND = Not Detected

Wells MW-1, MW-2, MW-9, MW-10, MW-17, MW-18, MW-19, and RW-7 are associated with NYSDEC Spill 06-01852 and are under a separate investigation

Well-34 has uneven casting top

est= Estimated Value \* = Well was dry

\*\* = Well equipped with automated product recovery system

\_= Data not recorded due to access issues

Wells were gauged on March 27, 2018

	APL (feet)	)										
Well Number							2015					
	Jan-16	Dec-15	Nov-15	Oct-15	Sep-15	Aug-15	Jul-15	Jun-15	May-15	Apr-15	Mar-15	Jan-15
MW-4	1.77	1.96	2.04	1.99	1.77	2.22	4.27	0.35	0.44	_	0.56	_
MW-5	3.24	4.83	5.41	4.16	4.26	4.45	4.22	2.30	2.41	2.55	3.10	4.40
MW - 6	##	##	##	##	##	##	##	2.30	##	##	##	##
MW-7	2.47	3.44	3.31	2.58	1.46	1.28	0.99	1.58	ND	1.94	1.79	##
MW-8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_
MW-12	_	ND	ND	_	_	_	_	ND	ND	ND	ND	_
MW - 13	_	ND	ND	-	_	_	-	ND	ND	ND	ND	-
MW – 14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW – 15	0.60	3.08	3.07	1.97	1.05	1.05	ND	1.24	1.21	1.56	1.67	1.71
MW-16	0.02	0.11	0.02	0.12	0.05	0.05	0.14	0.13	0.15	0.03	0.08	0.02
MW - 20	2.46	3.52	3.02	3.33	3.25	3.12	2.88	2.58	2.79	3.84	4.38	5.13
MW - 21	2.97	4.46	3.85	4.51	3.63	3.32	2.97	2.53	2.77	2.98	3.46	3.23
MW - 22	0.22	1.33	1.01	0.49	1.17	1.04	0.79	0.86	0.84	0.74	1.33	1.27
MW-23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-25	3.43	3.68	3.53	3.63	3.53	3.68	3.53	2.81	3.24	3.36	1.07	1.03
MW - 26	3.41	4.23	4.08	3.77	4.00	3.70	3.65	3.18	3.33	3.64	4.14	4.11
MW-27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 31	ND	ND	_	ND								
MW - 32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 34	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 37	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_
MW - 39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 40	ND	ND	_	ND								
MW - 41	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW - 1	ND	ND	_	ND								
RW - 2	2.83	4.28	_	2.64	2.97	3.41	5.54	5.28	5.44	2.82	4.19	4.52
RW - 3	2.37	4.27	2.92	4.14	1.39	2.14	4.31	2.23	2.23	1.81	3.28	3.41
RW - 4	2.51	2.82	2.31	1.99	1.09	2.02	3.65	3.66	3.53	3.53	1.43	1.35
RW - 5	1.92	1.96	5.64	4.18	2.03	5.79	4.87	4.69	4.75	0.70	0.85	0.91
RW - 6	0.74	0.77	0.65	0.66	0.65	0.61	0.78	1.96	2.35	0.71	1.19	1.14
RW - 8 **	_	_	_		_	_	_	_	_	2.14	2.93	2.92
RW – 9	3.46	4.62	4.37	3.52	2.68	3.23	3.04	4.82	4.79	4.28	5.68	5.65
RW - 10	4.77	4.46	5.32	4.45	4.12	4.12	5.71	3.80	3.95	3.65	4.96	5.04
RW - 11	3.07	4.65	4.39	3.59	3.24	3.62	3.43	3.66	3.67	3.00	3.87	3.97
RW- 12 **												

Data Recorded usir ## = :LNAPL obser

NI = Not Installed ND = Not Detected

Wells MW-1, MW-

Well-34 has uneven est= Estimated Val \* = Well was dry

\*\* = Well equipped \_\_= Data not recor

Wells were gauged

2 of 3

Well Number					2014									201	13						20	012	
	Sep-14	Aug-14	Jul-14	Jun-14	May-14	Apr-14	Mar-14	Feb-14	Jan-14	Dec-13	Nov-13	Oct-13	Sep-13	Aug-13	Jul-13	Apr-13	Mar-13	Feb-13	Jan-13	Dec-12	Nov-12	Oct-12	Sep-12
MW-4	1.75	1.90	1.24	Trace	_	0.01	Trace	0.23	0.22	0.30	0.66	0.78	##	3.49	2.22	0.59	0.67	0.44	0.44	0.80	0.31	0.33	3.13
MW - 5	4.79	5.03	1.97	3.39	_	3.14	2.80	2.98	_	6.46	7.17	5.54	##	5.08	3.92	3.00	2.39	4.32	3.00	4.11	3.50	3.41	5.58
MW-6	##	##	##	##	_	_	2.84	3.43	_	2.89	2.76	2.00	##	2.42	2.82	_	_	_	_	_	_	3.49	2.14
MW-7	2.01	2.16	0.60	0.01	_	0.17	0.17	_	_	4.78	4.70	4.00	##	2.77	1.06	1.92	4.92	5.45	1.30	1.36	2.00	1.84	1.83
MW - 8	ND	ND	ND	ND	_	ND	ND	_	_	ND													
MW – 12	ND	_	ND	ND	_	ND	ND	_	_	ND													
MW – 13	ND	_	ND	ND	_	ND	ND	_	_	ND													
MW – 14	ND	ND	ND	ND	_	ND	ND	_	_	ND													
MW – 15	2.19	2.32	##	0.45	_	0.61	0.30	0.38	_	3.11	3.19	3.34	##	2.14	0.70	-	0.32	1.07	-	1.56	0.99	0.76	2.67
MW – 16	_	0.03	0.99	Trace	_	0.01	0.01	0.10	_	0.23	0.22	0.19	##	0.05	0.07	0.02	0.01	0.10	0.25	0.20	ND	0.24	0.20
MW – 20	1.87	1.71	2.92	2.06	_	1.47	2.90	2.58	4.19	5.07	4.90	4.11	##	3.33	1.37	3.32	1.20	1.10	1.35	1.38	3.39	3.15	3.80
MW – 21	3.62	4.64	4.90	1.99	_	2.69	2.47	2.48	3.37	3.13	3.72	4.66	##	4.37	3.66	3.38	3.43	3.75	4.10	4.23	2.89	2.04	4.15
MW – 22	1.03	1.02	0.54	0.85	_	0.74	0.86	0.75	1.22	1.07	0.69	0.50	##	1.12	0.86	0.50	0.62	1.15	1.20	0.18	0.21	0.18	1.80
MW – 23	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW – 24	ND	ND	ND	ND	_	ND	ND	_	_	ND													
MW – 25	3.16	4.02	3.65	3.48	_	3.91	3.75		_	5.66	5.56	4.01	##	4.41	3.58	3.96	3.96	4.34	3.70	2.82	7.86	4.40	3.96
MW – 26	3.84	3.70	4.50	3.02	_	2.71	3.48	3.80	4.34	4.44	4.47	4.62	##	4.18	3.69	2.86	2.33	1.00	2.45	1.62	-	2.61	4.02
MW – 27	ND	ND	ND	ND	_	ND	ND	-	-	ND	0.99	ND	ND										
MW – 28	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI
MW - 29	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI
MW - 30	ND	ND	ND	ND	_	ND	ND	_		ND	ND	ND	ND	ND	NI								
MW – 31 MW – 32	ND ND	ND ND	ND ND	ND ND	_	ND ND	ND ND	_	_	ND ND	ND ND	ND ND	ND ND	ND ND	NI NI	NI	NI NI						
	ND ND		ND ND		_	ND		— NID	ND	ND ND		ND ND	ND ND			NI							_
MW - 34	ND ND	ND ND	ND	ND ND	_	ND	ND ND	ND	ND ND		ND	ND ND		ND ND	NI	NI	NI	NI	NI NI	NI	NI	NI NI	NI NI
MW – 35 MW – 36	ND ND	ND	NI NI	NI NI	NI	NI NI	NI NI	ND NI	NI NI	ND NI	ND NI	NI NI	ND NI	NI NI									
MW - 37	ND ND	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI						
MW – 37	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI							
MW - 39	ND ND	NI	NI	NI	NI NI	NI	NI	NI	NI NI	NI	NI	NI NI	NI										
MW - 40	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI							
MW - 41	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI								
MW – 42	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI								
RW – 1	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_	ND						
RW – 2	4.52	4.53	4.52	0.11	_	1.30	3.05	2.31	2.80	3.19	5.09	3.86	##	4.07	2.96	2.92	3.48	3.75	4.20	2.52	1.92	1.50	5.85
RW – 3	3.50	3.45	3.56	4.12	_	1.58	2.90	2.28	4.60 (est)	3.60	3.33	1.68	##	2.96	1.44	3.90	3.20	3.34	3.70	3.58	2.84	3,50	3.88
RW – 4	2.78	2.88	##	2.86	_	1.81	3.25	3.27	2.45	2.67	2.30	1.46	##	2.75	1.08	3.06	3.15	3.00	3.05	2.95	_	3.45	3.35
RW – 5	0.85	0.43	0.17	0.17	_	0.12	0.93	0.43	0.52	0.60	0.79	0.54	##	0.69	0.51	2.62	_	_	_	2.35	3.00	1.88	-
RW - 6	0.71	0.64	0.78	0.79	_	0.45	1.28	0.96	0.41	0.94	1.30	0.67	##	0.10	0.08	0.45	0.50	0.21	0.40	0.15	0.90	0.22	0.06
RW - 8 **	4.01	4.48	##	2.95	_	0.65	1.47	0.86	2.37	2.46	3.92	4.13	##	4.59	3.64	-	_	_	_	_	_	_	_
RW - 9	4.81	4.59	4.92	4.14	_	1.02	2.90	2.71	4.34	5.25	4.88	3.08	##	4.09	2.37	4.40	2.62	3.11	3.50	3.08	3.83	2.98	5.33
RW - 10	3.93	3.74	3.57	3.18	_	3.38	3.89	3.48	3.80	3.81	3.99	4.11	##	4.11	3.55	_	_	_	_	_	_	_	_
RW - 11	4.43	4.42	4.46	3.87	_	2.03	2.54	2.59	3.66	4.27	5.48	2.65	##	3.91	3.49	3.15	2.67	3.11	3.50	2.93	4.49	2.58	4.40
RW- 12 **		_		_	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_

#### Notes

Data Recorded usir

## = :LNAPL obsei

NI = Not Installed ND = Not Detected

Wells MW-1, MW-

Well-34 has uneven est= Estimated Val

\* = Well was dry \*\* = Well equipped

\_\_= Data not recor

Wells were gauged



GEOTECHNICAL

ENVIRONMENTAL

ECOLOGICAL

WATE

CONSTRUCTION MANAGEMENT

GZA GeoEnvironmental of NY 104 West 29th Street 10th Floor New York, NY 10001 T: 212.594.8140 F: 212.279.8180 www.gza.com



May 14, 2018 File No. 12.0076485.00

Via email: yukyin.wong@dec.ny.gov Mr. Bryan Wong New York State Department of Environmental Conservation Division of Environmental Remediation, Region 2 47-40 21<sup>st</sup> Street Long Island City, New York 11101

Re: Project Status Report

Former NuHart Plastic Manufacturing Site # 224136

280 Franklin Street Brooklyn, New York

Dear Mr. Wong:

Goldberg Zoino and Associates of New York, PC d/b/a GZA GeoEnvironmental of New York is transmitting this Project Status Report on behalf of Dupont Street Developers, LLC for the above referenced Site. Copies of this Project Status Report have also been provided to Dawn Hettrick of the New York State Department of Health. The Project Status Report is for March 2018 to April 2018. If you have any questions, please contact us at 973-774-3302 or 973-774-3307.

Sincerely,

GZA GeoEnvironmental of New York,

Steven Roland, P.E. Senior Consultant

David M. Winslow, Ph.D., P.G.

Email: dawn.hettrick@health.ny.gov

Email: bojinzhu@gmail.com

Email: yb321@yahoo.com

Principal

Ernest R. Hanna, P.E. Consultant Reviewer

Wendy A. Marsh

Cc:

Dawn Hettrick (NYSDOH)
Dupont Street Developers, LLC
Joseph Brunner
Jane O'Connell (NYSDEC)

Email: jane.oconnell@dec.ny.gov Email: wmarsh@hancocklaw.com



SEOTECHNICAL

ENVIRONMENTAL

ECOLOGICAL

WATER

CONSTRUCTION MANAGEMENT

GZA GeoEnvironmental of NY 104 West 29th Street 10th Floor New York, NY 10001 T: 212.594.8140 F: 212.279.8180 www.gza.com



This status report summarizes activities conducted at the Former NuHart Plastic Manufacturing Site (Site) in April 2018. Activities during this period were conducted by GZA GeoEnvironmental of New York. (GZA). GZA representatives also participated in Site evaluations and communications, and additional activities were conducted by others, as noted below. A Site Plan showing the general Site layout, nearby area, and associated wells is included as Figure 1. Schedule information is presented under each activity discussion.

Interim remedial measure (IRM) activities for monitoring and removal of light non-aqueous-phase liquid (LNAPL) at the Site were performed during the monitoring period in general conformance with the NYSDEC-approved Operation, Maintenance and Monitoring Plan (OM&M Plan) for the product recovery system. Investigation activities for the Site were previously completed as documented in previous project status reports and are not discussed herein.

#### **Interim Remedial Measure Activities**

Monthly IRM routine activities were conducted by GZA on April 26th, 2018. A table documenting the apparent LNAPL thickness measurements is provided as Attachment A and a Well Location Map showing the extent of LNAPL based on the monitoring date is provided as **Figure 1**.

#### **Maintenance Activities**

General maintenance activities were performed, including collection of spent IRM-related absorbent materials in the vicinity of recovery wells, placing new absorbent materials as needed to contain LNAPL, and proper labeling of waste containers used during this IRM event. Both skimming systems associated with recovery wells RW-8 and RW-12 were found to be powered and operational during the Site visit. RW-12 skimmer continues to have operational issues due to it's age and condition. The high-level shut off switch continues to be problematic requiring the collected LNAPL to be removed every 3 weeks to prevent an overflow condition. GZA is continuing to repair the unit.

#### Monitoring and LNAPL Removal

Gauging of onsite and offsite monitoring and recovery wells associated with the Site was conducted on April 26th, 2018. Well gauging was conducted from 7:00 am to 12:00 pm. Flood tides were observed with high tide at 7:14 am and Low tide at 1:22 pm. (ref. NOAA/NOS/CO-OPS Station ID (8517673) Hunters Point, Newtown Creek, NY). The wells that could not be accessed are noted on **Attachment A**. All wells containing LNAPL are noted, as are wells where LNAPL is absent. No changes were noted in the horizontal extent of the LNAPL. The depths to the water table were variable relative to the depths noted in the March 2018 status report, with some wells showing increases and some wells showing decreases. LNAPL apparent thicknesses were also variable, with increases generally noted in wells where the depth to water decreased.

The skimmer holding tanks were emptied during this event. The amount of LNAPL removed was estimated at 61 gallons, consisting of LNAPL from recovery wells RW-12 (56 gallons) and RW-8 (5 gallons). Based on previous LNAPL estimates, an estimated 2,917 gallons of



product have been removed from the subsurface since early 2015, with most of the LNAPL disposed. The removed LNAPL is stored in intermediate bulk container (IBC) tanks located in the Site building, pending pickup and offsite disposal. When the IBC tanks are nearly full, and/or the containerized spent absorbent materials require disposal, the designated waste management company will be contacted and waste disposal requested.

Eastern Environmental Solutions, Inc. (Eastern) is presently contracted to conduct waste management activities for disposal of product from the IBC tanks at the Site. To date, Eastern has transported and disposed an estimated 2,616 gallons of product at the Cycle Chem facility in Elizabeth, NJ as hazardous waste. Waste transport and disposal information will continue to be included in the progress reports following the months during which waste disposal activities occur.

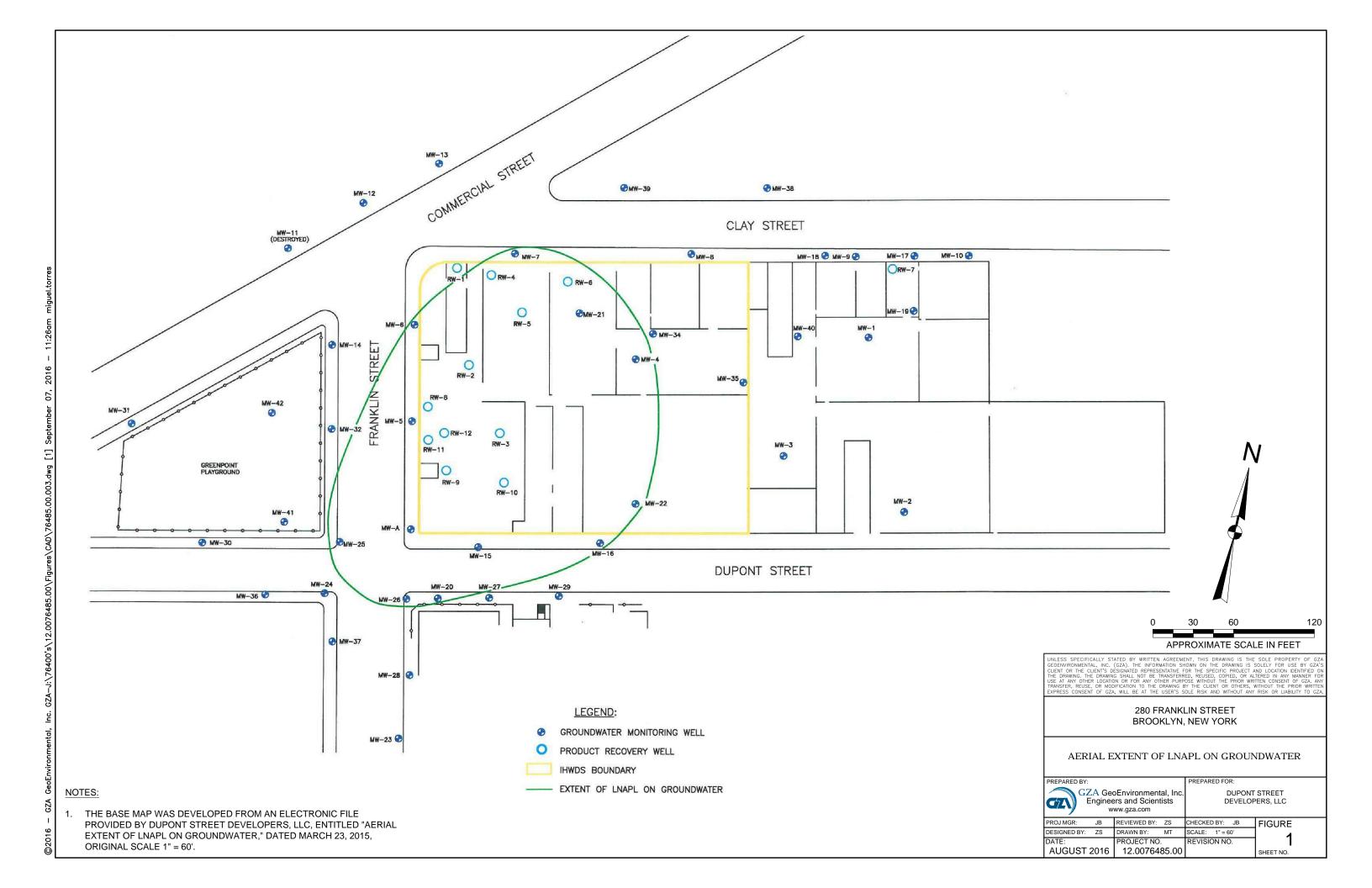
#### Site Soil Management Report

Pursuant to a request by the NYSDEC, GZA prepared the Site Soil Management Plan (SSMP) on October 28, 2016 to provide guidance for utility contractors regarding management for soils and groundwater potentially impacted by the Site. SSMP was followed during the pilot study sampling event.

#### **Attachments**

Attachment A – Apparent Thickness of LNAPL

Figure 1 – Well Location Map showing areal extent of LNAPL on groundwater



Readings taken 4/26/18 between 7:00 am and 12:00 pm (High tide @ 7:14 am and Low tide @ 1:22 PM pm)

	I LOW tide @	1:22 PIVI pm)	ı																						Appare	ont Thi
Well Number	*Depth to	*Depth to Water		2018	2							2017											2016		Арраге	III TIIIC
wen runnber	Product (feet)	(feet)	Apr-18	Mar-18	Feb-18	Jan-18	Nov-17	Oct-17	Sep-17	Aug-17	Jul-17	Jun-17	May-17	Apr-17	Mar-17	Feb-17	Jan-17	Dec-16	Nov-16	Oct-16	Sep-16	Aug-16	Jul-16	Jun-16	May-16 A <sub>1</sub>	nu 16
MW – 4	11.2	11.85	0.65	0.73	*	0.92	2.12	0.81	1.76	1.73	1.23	1.77	ND*	1.32	1.61	1.13	1.31	1.30	1.00	1.18	1.35	1.71	1.73	1.80		1.73
MW - 5	9.63	12.40	2.77	2.19	2.21	4.65	5.83	2.19	4.44	4.4	3.71	3.54	2.81	2.80	3.13	4.05	3.00	3.55	4.43	3.64	3.22	4.31	4.03	4.29		3.18
MW - 6	9.35	11.82	2.47	0.74	##	##	##	1.22	3.19	3.15	##	##	##	##	##	##	##	##	##	##	##	##	##	##		##
MW - 7	8.85	10.65	1.8	2.03	2.55	3.32	4.91	1.48	1.45	1.41	0.9	0.00	1.50	1.92	2.53	3.71	1.28	0.78	1.73	0.91	0.04	1.89	1.58			1.90
MW - 8	ND	11.88	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND ND		ND
MW – 12	ND	6.20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
MW – 13	ND	7.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
MW - 14	ND	8.38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
MW – 15	10.33	10.4	0.07	0.07	0.08	3.16	1.78	0.31	0.29	0.26	0.26	0.24	0.12	0.22	0.28	0.40	0.31	0.20	0.80	0.20	0.17	0.81	0.07	0.48		0.71
MW – 16	10.91	11.04	0.13	0.07	0.1	0.34	0.25	0.35	0.27	0.35	0.08	0.24	0.03	0.10	0.23	0.20	0.31	ND	ND	ND	ND	ND	0.01	0.48		0.01
MW – 10	10.28	12.8	2.52	1.77	1.02	3.15	3.99	2.52	2.58	2.63	2.9	2.83	2.61	2.94	2.33	3.02	3.02	2.88	3.28	2.90	3.16	2.89	2.88	2.85		2.49
MW – 20	11.03	12.65	1.62	1.38	2.29	3.83	4.79	3.26	3.35	2.13	1.45	2.75	3.31	3.30	3.04	3.62	7.59	3.27	3.32	1.25	2.39	3.61	2.96	2.95		4.18
MW – 21	11.85	12.61	0.76	1.11	0.28	0.37	1.77	1.25	1.24	1.21	0.75	0.66	0.66	0.78	0.64	0.65	0.50	0.51	0.38	0.30	0.01	0.51	0.87			0.48
MW – 23	ND	10.92	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
MW – 24	ND	10.17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND	ND ND	ND	ND		ND
MW - 25	9.92	13.95	4.03	3.45	3.44	3.66	4.54	4.03	4.05	4.02	3.73	4.09	3.85	3.70	3.74	3.47	3.89	3.62	3.60	4.20	3.79	3.65	4.01	3.75		3.33
MW – 26	10.01	13.15	3.14	2.48	3.19	3.95	5.59	3.81	3.82	3.79	3.65	3.42	3.29	3.73	3.64	3.47	3.14	3.02	3.56	4.20	3.28	4.26	3.58	3.82		3.37
MW – 20	ND	10.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.29 ND	3.73 ND	3.04 ND	3.24 ND	3.14 ND	3.20 ND	ND	ND	3.28 ND	4.20 ND	ND	ND		ND
MW – 28	ND	10.71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
MW – 29	ND	10.71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND	ND	ND	ND		ND
MW - 30	ND	9.59	ND	ND ND	ND	ND ND	ND	ND	ND	ND ND	ND ND	ND	ND	ND	ND	ND		ND								
MW – 30	ND ND	8.96	ND ND	ND ND	ND	ND ND	ND	ND ND	ND ND	- ND	- ND	ND	ND	- ND	ND	ND		ND								
MW – 31	ND	9.61	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
MW – 34	ND	11.06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
MW – 35	ND	14.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
MW – 36	ND	10.42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND ND	ND	ND ND	ND	ND ND	ND ND	ND	ND	ND	ND	ND		ND
MW – 37	ND	10.42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
MW – 38	ND	9.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	- ND		_	- ND		ND	ND		ND
MW – 39	ND	8.24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
MW – 40	ND	6.51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
MW – 41	ND	9.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
MW - 42	ND	8.85	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
RW – 1	ND	8.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
RW – 2	11.80	13.45	1.65	0.08	5.52	4.01	5.19	0.56	0.58	0.53	6.09	6.25	0.42	1.13	2.90	3.09	3.53	1.65	1.18	1.26	1.35	1.88	2.05	2.41		2.12
RW – 3	14.77	17.29	2.52	2.12	3.03	ND	3.31	3.17	3.15	3.22	2.28	3.44	2.85	2.71	3.46	2.98	3.10	1.03	3.95	2.40	2.50	3.08	1.97	2.49		2.17
RW – 4	11.85	15.65	3.8	3.01	02.39	3.06	4.32	4.33	4.17	4.18	3.1	4.1	03.69	3.65	3.69	3.67	3.05	3.80	2.80	2.77	3.30	2.73	2.65	2.32		2.22
RW – 5	11.45	12.10	0.65	0.34	4.64	0.49	4.49	5.28	5.27	5.26	5.42	3.75	5.00	5.44	5.10	0.70	2.95	1.55	3.05	0.42	0.36	0.50	4.97			2.66
RW – 5	11.43	12.10	0.96	0.91	00.90	2.61	1.64	0.73	0.6	1.61	0.93	5.35	1.05	1.27	1.22	0.70	0.90	0.85	0.68	0.42	0.36	1.46	1.29	0.81		0.73
RW - 8 **	13.64	13.67	0.03	0.03	0.96	1.99	-	1.15	2.2	3.62	1.2	2.34	0.02	0.01	1.22	0.90	0.90	0.83	- 0.08	0.67	0.92	-	1.29	0.01	0.07	7.73
RW - 9	13.13	15.41	2.28	1.51	2.88	4.32	5.58	3.72	3.77	3.69	2.84	3.25	2.70	2.69	3.50	3.66	2.47	3.09	3.57	2.45	2.35	3.19	2.15	3.18	2.75 3	3.09
RW – 9 RW – 10	12.81	15.41	3.7	0.66	3.48	4.64	4.28	3.65	3.67	3.71	3.67	3.78	4.07	3.79	4.27	4.70	4.15	3.86	3.45	3.80	3.36	4.44	3.91	3.69		3.66
RW - 10	13.14	17.48	4.34	2.41	2.50	5.01	5.5	2.97	4.57	3.93	2.33	3.00	2.92	3.00	3.55	3.73	2.65	1.90	2.04	2.43	2.12	3.66	2.98			2.94
RW-11 RW-12 **	13.14	15.35	2.61	0.02	1.12	1.5	5.96	3.65	5.4	2.68	0.01	0.03	0.01	0.02	0.80	3.89	2.03	1.90	2.04	2.43	2.12	3.00	2.98	5.45	J.00 2	74
KW-12 ***	12.74	15.55	2.61	0.02	1.12	1.3	3.90	5.05	3.4	2.08	0.01	0.03	0.01	0.02	0.80	3.89	_	_	_	_	_					

#### Notes

Data Recorded using an oil/water interface probe, measurements from the tops of well casings

## = :LNAPL observed, apparent thickness not determinded

NI = Not Installed

ND = Not Detected

Wells MW-1, MW-2, MW-9, MW-10, MW-17, MW-18, MW-19, and RW-7 are associated with NYSDEC Spill 06-01852 and are under a separate investigation

Well-34 has uneven casting top

est= Estimated Value \* = Well was dry

\*\* = Well equipped with automated product recovery system

\_= Data not recorded due to access issues

Wells were gauged on April 26, 2018

	kness of LN	APL (feet)												
Well Number									2015					
	Mar-16	Feb-16	Jan-16	Dec-15	Nov-15	Oct-15	Sep-15	Aug-15	Jul-15	Jun-15	May-15	Apr-15	Mar-15	Jan-15
MW-4	1.43	1.85	1.77	1.96	2.04	1.99	1.77	2.22	4.27	0.35	0.44	_	0.56	_
MW - 5	3.14	1.85	3.24	4.83	5.41	4.16	4.26	4.45	4.22	2.30	2.41	2.55	3.10	4.40
MW-6	##	##	##	##	##	##	##	##	##	2.30	##	##	##	##
MW-7	1.66	2.31	2.47	3.44	3.31	2.58	1.46	1.28	0.99	1.58	ND	1.94	1.79	##
MW-8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_
MW-12	_	_	_	ND	ND	_	_	_	_	ND	ND	ND	ND	_
MW – 13	ND	1	-	ND	ND	-	-	1	-	ND	ND	ND	ND	_
MW – 14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW – 15	0.03	0.04	0.60	3.08	3.07	1.97	1.05	1.05	ND	1.24	1.21	1.56	1.67	1.71
MW-16	0.02	0.16	0.02	0.11	0.02	0.12	0.05	0.05	0.14	0.13	0.15	0.03	0.08	0.02
MW-20	2.43	1.99	2.46	3.52	3.02	3.33	3.25	3.12	2.88	2.58	2.79	3.84	4.38	5.13
MW-21	2.68	2.42	2.97	4.46	3.85	4.51	3.63	3.32	2.97	2.53	2.77	2.98	3.46	3.23
MW-22	0.44	0.15	0.22	1.33	1.01	0.49	1.17	1.04	0.79	0.86	0.84	0.74	1.33	1.27
MW-23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-25	3.42	3.32	3.43	3.68	3.53	3.63	3.53	3.68	3.53	2.81	3.24	3.36	1.07	1.03
MW - 26	2.97	3.82	3.41	4.23	4.08	3.77	4.00	3.70	3.65	3.18	3.33	3.64	4.14	4.11
MW - 27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW – 29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 31	ND	ND	ND	ND	_	ND								
MW - 32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 34	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 37	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_
MW - 39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 40	ND	ND	ND	ND	_	ND								
MW - 41	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW - 42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW - 1	ND	ND	ND	ND	_	ND								
RW - 2	3.34	2.70	2.83	4.28	_	2.64	2.97	3.41	5.54	5.28	5.44	2.82	4.19	4.52
RW - 3	2.09	1.64	2.37	4.27	2.92	4.14	1.39	2.14	4.31	2.23	2.23	1.81	3.28	3.41
RW - 4	2.93	2.03	2.51	2.82	2.31	1.99	1.09	2.02	3.65	3.66	3.53	3.53	1.43	1.35
RW - 5	3.21	2.53	1.92	1.96	5.64	4.18	2.03	5.79	4.87	4.69	4.75	0.70	0.85	0.91
RW - 6	0.74	0.76	0.74	0.77	0.65	0.66	0.65	0.61	0.78	1.96	2.35	0.71	1.19	1.14
RW - 8 **	_	_	_	_	_	_	_	_	_	_	_	2.14	2.93	2.92
RW - 9	3.81	2.42	3.46	4.62	4.37	3.52	2.68	3.23	3.04	4.82	4.79	4.28	5.68	5.65
RW – 10	3.67	4.69	4.77	4.46	5.32	4.45	4.12	4.12	5.71	3.80	3.95	3.65	4.96	5.04
RW – 11	3.05	2.45	3.07	4.65	4.39	3.59	3.24	3.62	3.43	3.66	3.67	3.00	3.87	3.97
RW- 12 **					,									

#### Notes

Data Recorded usir

## = :LNAPL obser

NI = Not Installed ND = Not Detected

Wells MW-1, MW-

Well-34 has uneven est= Estimated Val

\* = Well was dry

\*\* = Well equipped

\_\_= Data not recor

Wells were gauged

Well Number					2014									201	13						20	012	
	Sep-14	Aug-14	Jul-14	Jun-14	May-14	Apr-14	Mar-14	Feb-14	Jan-14	Dec-13	Nov-13	Oct-13	Sep-13	Aug-13	Jul-13	Apr-13	Mar-13	Feb-13	Jan-13	Dec-12	Nov-12	Oct-12	Sep-12
MW-4	1.75	1.90	1.24	Trace	_	0.01	Trace	0.23	0.22	0.30	0.66	0.78	##	3.49	2.22	0.59	0.67	0.44	0.44	0.80	0.31	0.33	3.13
MW - 5	4.79	5.03	1.97	3.39	_	3.14	2.80	2.98	_	6.46	7.17	5.54	##	5.08	3.92	3.00	2.39	4.32	3.00	4.11	3.50	3.41	5.58
MW-6	##	##	##	##	_	_	2.84	3.43	_	2.89	2.76	2.00	##	2.42	2.82	_	_	_	_	_	_	3.49	2.14
MW-7	2.01	2.16	0.60	0.01	_	0.17	0.17	_	_	4.78	4.70	4.00	##	2.77	1.06	1.92	4.92	5.45	1.30	1.36	2.00	1.84	1.83
MW - 8	ND	ND	ND	ND	_	ND	ND	_	_	ND													
MW – 12	ND	_	ND	ND	_	ND	ND	_	_	ND													
MW – 13	ND	_	ND	ND	_	ND	ND	_	_	ND													
MW – 14	ND	ND	ND	ND	_	ND	ND	_	_	ND													
MW – 15	2.19	2.32	##	0.45	_	0.61	0.30	0.38	_	3.11	3.19	3.34	##	2.14	0.70	-	0.32	1.07	-	1.56	0.99	0.76	2.67
MW – 16	_	0.03	0.99	Trace	_	0.01	0.01	0.10	_	0.23	0.22	0.19	##	0.05	0.07	0.02	0.01	0.10	0.25	0.20	ND	0.24	0.20
MW – 20	1.87	1.71	2.92	2.06	_	1.47	2.90	2.58	4.19	5.07	4.90	4.11	##	3.33	1.37	3.32	1.20	1.10	1.35	1.38	3.39	3.15	3.80
MW – 21	3.62	4.64	4.90	1.99	_	2.69	2.47	2.48	3.37	3.13	3.72	4.66	##	4.37	3.66	3.38	3.43	3.75	4.10	4.23	2.89	2.04	4.15
MW – 22	1.03	1.02	0.54	0.85	_	0.74	0.86	0.75	1.22	1.07	0.69	0.50	##	1.12	0.86	0.50	0.62	1.15	1.20	0.18	0.21	0.18	1.80
MW – 23	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW – 24	ND	ND	ND	ND	_	ND	ND	_	_	ND													
MW – 25	3.16	4.02	3.65	3.48	_	3.91	3.75		_	5.66	5.56	4.01	##	4.41	3.58	3.96	3.96	4.34	3.70	2.82	7.86	4.40	3.96
MW – 26	3.84	3.70	4.50	3.02	_	2.71	3.48	3.80	4.34	4.44	4.47	4.62	##	4.18	3.69	2.86	2.33	1.00	2.45	1.62	-	2.61	4.02
MW – 27	ND	ND	ND	ND	_	ND	ND	-	-	ND	0.99	ND	ND										
MW – 28	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI
MW - 29	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI
MW - 30	ND	ND	ND	ND	_	ND	ND	_		ND	ND	ND	ND	ND	NI								
MW – 31 MW – 32	ND ND	ND ND	ND ND	ND ND	_	ND ND	ND ND	_	_	ND ND	ND ND	ND ND	ND ND	ND ND	NI NI	NI	NI NI						
	ND ND		ND ND		_	ND		— NID	ND	ND ND		ND ND	ND ND			NI							_
MW - 34	ND ND	ND ND	ND	ND ND	_	ND	ND ND	ND	ND ND		ND	ND ND		ND ND	NI	NI	NI	NI	NI NI	NI	NI	NI NI	NI NI
MW – 35 MW – 36	ND ND	ND	NI NI	NI NI	NI	NI NI	NI NI	ND NI	NI NI	ND NI	ND NI	NI NI	ND NI	NI NI									
MW - 37	ND ND	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI						
MW – 37	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI							
MW - 39	ND ND	NI	NI	NI	NI NI	NI	NI	NI	NI NI	NI	NI	NI NI	NI										
MW - 40	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI							
MW - 41	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI								
MW – 42	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI								
RW – 1	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_	ND						
RW – 2	4.52	4.53	4.52	0.11	_	1.30	3.05	2.31	2.80	3.19	5.09	3.86	##	4.07	2.96	2.92	3.48	3.75	4.20	2.52	1.92	1.50	5.85
RW – 3	3.50	3.45	3.56	4.12	_	1.58	2.90	2.28	4.60 (est)	3.60	3.33	1.68	##	2.96	1.44	3.90	3.20	3.34	3.70	3.58	2.84	3,50	3.88
RW – 4	2.78	2.88	##	2.86	_	1.81	3.25	3.27	2.45	2.67	2.30	1.46	##	2.75	1.08	3.06	3.15	3.00	3.05	2.95	_	3.45	3.35
RW – 5	0.85	0.43	0.17	0.17	_	0.12	0.93	0.43	0.52	0.60	0.79	0.54	##	0.69	0.51	2.62	_	_	_	2.35	3.00	1.88	-
RW - 6	0.71	0.64	0.78	0.79	_	0.45	1.28	0.96	0.41	0.94	1.30	0.67	##	0.10	0.08	0.45	0.50	0.21	0.40	0.15	0.90	0.22	0.06
RW - 8 **	4.01	4.48	##	2.95	_	0.65	1.47	0.86	2.37	2.46	3.92	4.13	##	4.59	3.64	-	_	_	_	_	_	_	_
RW - 9	4.81	4.59	4.92	4.14	_	1.02	2.90	2.71	4.34	5.25	4.88	3.08	##	4.09	2.37	4.40	2.62	3.11	3.50	3.08	3.83	2.98	5.33
RW - 10	3.93	3.74	3.57	3.18	_	3.38	3.89	3.48	3.80	3.81	3.99	4.11	##	4.11	3.55	_	_	_	_	_	_	_	_
RW - 11	4.43	4.42	4.46	3.87	_	2.03	2.54	2.59	3.66	4.27	5.48	2.65	##	3.91	3.49	3.15	2.67	3.11	3.50	2.93	4.49	2.58	4.40
RW- 12 **		_		_	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_

#### Notes

Data Recorded usir

## = :LNAPL obsei

NI = Not Installed ND = Not Detected

Wells MW-1, MW-

Well-34 has uneven est= Estimated Val

\* = Well was dry \*\* = Well equipped

\_\_= Data not recor

Wells were gauged



SECTECHNICAL

ENVIRONMENTAL

ECOLOGICA

WATER

CONSTRUCTION MANAGEMENT

GZA GeoEnvironmental of NY 104 West 29th Street 10th Floor New York, NY 10001 T: 212.594.8140 F: 212.279.8180 www.gza.com



June 12, 2018 File No. 12.0076485.00

Via email: yukyin.wong@dec.ny.gov Mr. Bryan Wong New York State Department of Environmental Conservation Division of Environmental Remediation, Region 2 47-40 21<sup>st</sup> Street Long Island City, New York 11101

Re: Project Status Report

Former NuHart Plastic Manufacturing Site # 224136

280 Franklin Street Brooklyn, New York

Dear Mr. Wong:

Goldberg Zoino and Associates of New York, PC d/b/a GZA GeoEnvironmental of New York is transmitting this Project Status Report on behalf of Dupont Street Developers, LLC for the above referenced Site. Copies of this Project Status Report have also been provided to Dawn Hettrick of the New York State Department of Health. The Project Status Report is for April 2018 to May 2018. If you have any questions, please contact us at 973-774-3302 or 973-774-3307.

Sincerely,

GZA GeoEnvironmental of New York,

Steven Roland, P.E. Senior Consultant

David M. Winslow, Ph.D., P.G. Principal

Ernest R. Hanna, P.E. Consultant Reviewer

Cc:

Dawn Hettrick (NYSDOH)
Dupont Street Developers, LLC
Joseph Brunner
Jane O'Connell (NYSDEC)

Wendy A. Marsh

Email: dawn.hettrick@health.ny.gov

Email: bojinzhu@gmail.com Email: yb321@yahoo.com

Email: jane.oconnell@dec.ny.gov Email: wmarsh@hancocklaw.com



GEOTECHNICAL

ENVIRONMENTAL

ECOLOGICAL

WATER

CONSTRUCTION MANAGEMENT

GZA GeoEnvironmental of NY 104 West 29th Street 10th Floor New York, NY 10001 T: 212.594.8140 F: 212.279.8180 www.qza.com



This status report summarizes activities conducted at the Former NuHart Plastic Manufacturing Site (Site) in May 2018. Activities during this period were conducted by GZA GeoEnvironmental of New York. (GZA). GZA representatives also participated in Site evaluations and communications, and additional activities were conducted by others, as noted below. A Site Plan showing the general Site layout, nearby area, and associated wells is included as Figure 1. Schedule information is presented under each activity discussion.

Interim remedial measure (IRM) activities for monitoring and removal of light non-aqueous-phase liquid (LNAPL) at the Site were performed during the monitoring period in general conformance with the NYSDEC-approved Operation, Maintenance and Monitoring Plan (OM&M Plan) for the product recovery system. Investigation activities for the Site were previously completed as documented in previous project status reports and are not discussed herein.

#### **Interim Remedial Measure Activities**

Monthly IRM routine activities were conducted by GZA on May 16<sup>th</sup> and 23rd, 2018. A table documenting the apparent LNAPL thickness measurements is provided as Attachment A and a Well Location Map showing the extent of LNAPL based on the monitoring date is provided as **Figure 1**.

#### **Maintenance Activities**

General maintenance activities were performed, including collection of spent IRM-related absorbent materials in the vicinity of recovery wells, placing new absorbent materials as needed to contain LNAPL, and proper labeling of waste containers used during this IRM event. Both skimming systems associated with recovery wells RW-8 and RW-12 were found to be powered and operational during the Site visit. RW-12 skimmer continues to have operational issues due to it's age and condition. The high-level shut off switch continues to be problematic, requiring the collected LNAPL to be removed every 3 weeks to prevent an overflow condition. GZA continues to remove the collected oil manually on a scheduled every 3-week basis to prevent any overflow.

# Monitoring and LNAPL Removal

Gauging of onsite and offsite monitoring and recovery wells associated with the Site was conducted on May 23rd, 2018. Well gauging was conducted from 7:00 am to 12:00 pm. Flood tides were observed with high tide at 3:43 AM and Low tide at 10:27 AM. (ref. NOAA/NOS/CO-OPS Station ID (8517673) Hunters Point, Newtown Creek, NY). The wells that could not be accessed are noted on **Attachment A**. All wells containing LNAPL are noted, as are wells where LNAPL is absent. No changes were noted in the horizontal extent of the LNAPL. The depths to the water table were variable relative to the depths noted in the April 2018 status report, with some wells showing increases and some wells showing decreases. LNAPL apparent thicknesses were also variable, with increases generally noted in wells where the depth to water increased and decreases noted in wells where the depth to water decreased.



The skimmer holding tanks were emptied during this event. The amount of LNAPL removed was estimated at 61 gallons, consisting of LNAPL from recovery wells RW-12 (55 gallons) and RW-8 (6 gallons). Based on previous LNAPL estimates, an estimated 2,978 gallons of product have been removed from the subsurface since early 2015, with most of the LNAPL disposed. The removed LNAPL is stored in intermediate bulk container (IBC) tanks located in the Site building, pending pickup and offsite disposal. When the IBC tanks are nearly full, and/or the containerized spent absorbent materials require disposal, the designated waste management company will be contacted and waste disposal requested.

Eastern Environmental Solutions, Inc. (Eastern) is presently contracted to conduct waste management activities for disposal of product from the IBC tanks at the Site. To date, Eastern has transported and disposed an estimated 2,616 gallons of product at the Cycle Chem facility in Elizabeth, NJ as hazardous waste. Waste transport and disposal information will continue to be included in the progress reports following the months during which waste disposal activities occur.

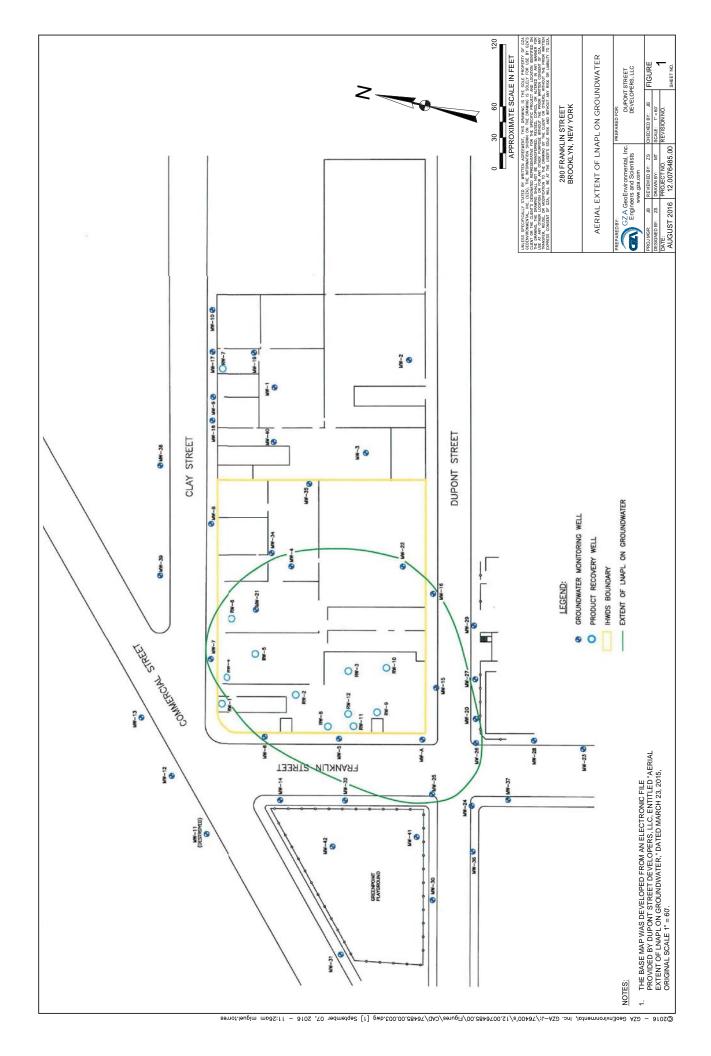
# Site Soil Management Report

Pursuant to a request by the NYSDEC, GZA prepared the Site Soil Management Plan (SSMP) on October 28, 2016 to provide guidance for utility contractors regarding management for soils and groundwater potentially impacted by the Site. SSMP was followed during the pilot study sampling event.

#### **Attachments**

Attachment A – Apparent Thickness of LNAPL

Figure 1 – Well Location Map showing areal extent of LNAPL on groundwater



Readings taken 5/23/18 between 7:00 am and 12:00 pm (High tide @ 3:43 AM and Low tide @ 10:27 AM)

App		Jun-16	1.80	4.29	##	2.22	⊢	QN	┝	H	0.48	⊢	2.85	2.95	H	ND	ND	3.75	3.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	QN	ND	ND	ND	2.41	2.49	2.32	2.76	0.81	I	3.18	3.69	3.43	Į
	2016	Jul-16	Н	H	#	H	Ͱ	H	H	H	H	Н	┝	H	H	H	┝	H	H	Н	Н	QN	Н	Ø	QN	QN	ND	QV	QV	QN	Ø	Ø	Ø	Ø	Ð	2.05	1.97	2.65	4.97	1.29	-	2.15	3.91	2.98	ļ
		Aug-16	1.71	4.31	#	1.89	Ø	Ø	Ø	Ø	0.81	Ø	2.89	3.61	0.51	Ø	Ø	3.65	4.26	QN	QN	QN	QN	1	QN	N	ND	QN	ND	1	Ø	Ø	Ø	Ø	Ø	1.88	3.08	2.73	0.50	1.46	1	3.19	4,44	3.66	ļ
		Sep-16	1.35	3.22	#	0.04	Ð	Ø	Ð	Ø	0.17	Ð	3.16	2.39	0.01	Q	Ø	3.79	3.28	QN	QN	QN	QN	-	QN	ON.	ON	QV.	QN	ı	Ð	Ð	Ø	Ð	Ø	1.35	2.50	3.30	0.36	0.92	1	2.35	3.36	2.12	
		Oct-16	1.18	3.64	##	0.91	QN	QN	ND	ND	0.20	QN	2.90	1.25	0.30	QN	ND	4.20	4.00	ND	ND	ND	ND	ı	ND	ND	ND	ND	ND	ı	ND	ND	ND	ND	ΩN	1.26	2.40	2.77	0.42	0.87	ı	2.45	3.80	2.43	
		Nov-16	1.00	4.43	##	1.73	QN	ND	QN	ND	0.80	QN	3.28	3.32	0.38	ND	ON	3.60	3.56	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	1.18	3.95	2.80	3.05	0.68	-	3.57	3.45	2.04	
		Dec-16	1.30	3.55	##	82.0	QN	QN	QN	ND	0.20	QN	2.88	3.27	0.51	QN	QN	3.62	3.20	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ı	ND	QN	QN	ND	ND	1.65	1.91	3.80	1.55	0.85	ı	3.09	3.86	1.90	
		Jan-17	131	3.00	##	1.28	Q.	Ø	Q.	Ø	0.31	0.31	3.02	7.59	0.50	Q	Q	3.89	3.14	ON	QN	QN	ND	Q	QN	ND	ND	QN	QN	QN	Q	Ð	Ø	Q.	Ø	3.53	3.10	3.05	2.95	060	ı	2.47	4.15	2.65	
		Feb-17	1.13	4.05	#	3.71	Q.	Q	Ø	Q	0.40	0.20	3.02	3.62	970	Q	Ø	3.47	3.24	ND	QN	QN	ND	Ø	QN	ND	ND	ON.	QN	QN	Ø	Ø	Ø	Ø	Q	3.09	2.98	3.67	0.70	0.90	1	3.66	4.70	3.73	
		Mar-17	1971	3.13	##	2.53	QN	QN	ND	ND	0.28	0.23	2.33	3.04	0.64	QN	QN	3.74	3.64	ND	ND	ND	ND	QN	ND	ND	ND	ND	ND	ND	ND	ND	QN	QN	QN	2.90	3.46	3.69	5.10	1.22	1	3.50	4.27	3.55	
		Apr-17	1.32	2.80	##	1.92	QN	N QN	QN	ND	0.22	0.10	2.94	3.30	820	ND	ND	3.70	3.73	ND	ND	ND	ND	ND	ND	ND	ND	ON	ND	ND	ND	QN	ND	QN	ND	1.13	2.71	3.65	5.44	1.27	0.01	2.69	3.79	3.00	
		May-17	ND*	2.81	#	1.50	Ð	Ð	Q.	Ð	0.12	0.03	2.61	3.31	99'0	QN	QN QN	3.85	3.29	QN	ND	QN.	ND	QN QN	ND	ND	ND	QN.	ND	NO ON	NO ON	QN QN	Q.	QN QN	Q.	0.42	2.85	69'80	5.00	1.05	0.02	2.70	4.07	2.92	
				3.54	##	000	QN	QX	QN	QN	).24	1.28	2.83	2.75	797	ND	ΩN	1.09	3.42	ND	UD	ND	ND	ΩN	UD	ND	ND	ND	ND	ND	UD	QN	ND	ND	ND	5.25	3.44	4.1	3.75	5.35	2.34	3.25	3.78	3.00	
	2017																					H									-	1							ŀ						
																															-	-	-		-					0.93				2.3	
		71-gnV	1.73	4.4	3.15	1.41	QN	ND	QN	QN	0.26	0.35	2.63	2.13	121	QN	ND	4.02	3.79	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	QN	ND	QN	ND	0.53	3.22	4.18	5.26	191	3.62	3.69	3.71	3.93	
		Sep-17	1.76	4,44	3.19	1.45	Ð	Ø	Ø	R	0.29	0.37	2.58	3.35	1.24	Ð	Q.	4.05	3.82	ON.	QN	QN	QV	Q.	QN	QN	QN	QV	ND	QV.	QV.	R	Q	R	Q.	0.58	3.15	4.17	5.27	9.0	2.2	3.77	3.67	4.57	
		Oct-17	0.81	2.19	1.22	1.48	QN	QN	ND	QN	0.31	0.35	2.52	3.26	1.25	QN	QN	4.03	3.81	ND	ND	ND	ND	QN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56	3.17	4.33	5.28	0.73	1.15	3.72	3.65	2.97	
		Nov-17	2.12	5.83	0.0	4.91	Ø	Q	Ø	Ð	1.78	0.25	3.99	4.79	1.77	Ø	Ø	4.54	5.59	QN	ND	ON	ND	Ø	QN	QN	ON	Ø	ND	ND	ND	Ø	Ø	Ø	Ø	5.19	3.31	4.32	4.49	1.64	I	5.58	4.28	5.5	
		Jan-18	0.92	4.65	9.6	3.32	ND	ND	ND	ND	3.16	0.34	3.15	3.83	0.37	ND	ND	3.66	3.95	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.01	ND	3.06	0.49	2.61	1.99	4.32	4.64	5.01	
		Feb-18		2.21	##	2.55	QN	QN	ND	ND	80'0	0.1	1.02	2.29	0.28	ND	ND	3.44	3.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.52	3.03	02.39	4.64	06.00	960	2.88	3.48	2.50	
	81	Mar-18	173	615	0.74	500	Ð	₽	Ð	₽	203		77.	38	H	Q.	Q.	.45	.48	Q.	Q)	QV.	Q.	Q.	Q)	Q.	Q	QV	QV	Q	Q	Ð	Ð	Q.	Q.	800	712	101	134	0.91	103	51	99"	.41	
	2018																																												
		Apr-18	0.65	2.77	2.47	1.80	QN	QN	ND	QN	0.07	0.13	2.52	1.62	0.76	QN	ND	4.03	3.14	ND	ND	ND	QN	ND	ND	ND	ND	ND	ND	QN	QN	ND	QN	ND	QN	1.65	2.52	3.80	0.65	9670	0.03	2.28	3.70	4.34	
		May-18	1.13	1.83	0.5	1.99	Ð	Ð	QV.	Ð	0.04	0.10	1.55	1.42	68'0	QV	QV	2.89	2.35	QN	QN	QN	QN	QV	QN	QN	QN	ND	QV	QN	Ø	QN	ON.	QN	QV	80'0	2.03	2.97	0.33	0.88	0.02	2.38	1.60	2.52	
,_	*Depth to Water	(1)	11.78	11.56	9.24	10.97	9.74	6.35	7.58	8.59	10.42	11.15	12.03	12.52	12.78	11.01	10.20	12.87	12.36	10.43	10,84	10.97	9.82	10.6	9.83	11.12	14.21	10.62	11.01	9.37	8.49	6.90	9.76	9.01	8.60	11.99	17.01	14.98	11.83	12.69	13.72	12.69	14.54	15.83	
H	*Depth to *De		99'0	9.73	8.74	868	QV.	Ð	QV.	₽ R	0.38	1.05	0.48	1.10	1.89	Q.	Q.	866	10.01	NO.	QN	ND DX	QN	Q.	QN	QV.	QV	ND	QV	QV	QV	QV QV	Q.	QN QN	QN Q	11.91	14.98	12.01	11.50	11.81	13.7	10.31	12.94	13.31	
	_																					_									_														
	Well Number		MW-	MW -	MW - 6	MW-	MW -	MW-	MW-	MW-1	MW-	MW-	MW-	MW-	MW-	WM	MW-	MW-	MW-	WM	MW-	MW-	MW-	MW-	MW-	MW-	MW-	MW-	MW-	WW		MW-40	MW-	MW-	RW-	RW	RW	RW	RW -	RW-6	RW - 8 **	RW - 9	RW - 1	RW-1	

1 of 3

Well Number											2012					
	May-16	Apr-16	Mar-16	Feb-16	Jan-16	Dec-15	Nov-15	Oct-15	Sep-15	Aug-15	Jul-15	Jun-15	May-15	Apr-15	Mar-15	Jan-15
MW - 4	1.53	1.73	1.43	1.85	1.77	1.96	2.04	1.99	1.77	2.22	4.27	0.35	0,44	ı	950	1
MW - 5	3.07	3.18	3.14	1.85	3.24	4.83	5.41	4.16	4.26	4.45	4.22	2.30	2.41	2.55	3.10	4.40
MW - 6	##	##	##	##	##	##	##	##	##	##	#	2.30	##	##	##	##
MW - 7	2.11	1.90	1.66	2.31	2.47	3.44	3.31	2.58	1.46	1.28	66'0	1.58	Q.	1.94	1.79	9.0
MW - 8	ΩN	QN	QN	QN	QN	Ø	QN	Q	QN	QN	Ø	ND	QN	QN	QN	ı
MW- 12	QN	QN	ı	I	I	Ø	ND	ı	ı	ı	ı	ND	QN	QN	QN	1
MW- 13	QN	Ø	QN	ı	ı	Ð	ND	ı	ı	ı	ı	ND	Ø	QN	QN	ı
MW- 14	QN	Ø	ND	Ø	ND	Ø	ND	Ð	ND	ND	Ø	ND	Ø	ND	QN	QN
MW- 15	0.22	0.71	0.03	0.04	09'0	3.08	3.07	1.97	1.05	1.05	Ø	1.24	1.21	1.56	1.67	1.71
MW- 16	0.02	10.0	0.02	0.16	0.02	0.11	0.02	0.12	0.05	0.05	0.14	0.13	0.15	0.03	80.0	0.02
MW-20	2.22	2.49	2.43	1.99	2.46	3.52	3.02	3.33	3.25	3.12	2.88	2.58	2.79	3.84	4.38	5.13
MW-21	2.63	4.18	2.68	2.42	2.97	4.46	3.85	4.51	3.63	3.32	2.97	2.53	2.77	2.98	3.46	3.23
MW- 22	0.45	0.48	0.44	0.15	0.22	1.33	1.01	0.49	1.17	1.04	62.0	0.86	0.84	0.74	1.33	1.27
MW-23	QN	Ð	QN	Ð	ND	Ø	QN	Ø	ND	ND	Ø	QN	Ð	QN	QN	QN
MW-24	QN	Ø	QN	Ø	ND	Ð	ND	Ð	ND	ND	Ø	ND	Ø	ND	ND	QN
MW-25	3.55	3.33	3.42	3.32	3.43	3.68	3.53	3.63	3,53	3.68	3.53	2.81	3.24	3.36	1.07	1.03
MW-26	3.41	3.37	2.97	3.82	3.41	4.23	4.08	3.77	4.00	3.70	3.65	3.18	3.33	3.64	4.14	4.11
MW-27	QN	Ð	QN	Ð	ND	Ð	QN	Ð	QN	QN	Ð	ND	Ð	QN	QN	Ð
MW-28	QN	Ð	QN	Q	QN	Ø	QN	Ð	QN	ND	Ø	ON	Ø	QN	QN	QN
MW-29	QN	Ð	QN	Q	ND	Ð	ND	Ð	ND	ND	Ð	ND	Ø	ND	QN	QN
MW-30	QN	Ø	QN	Ð	ND	Ø	QN	Q	ND	ND	Ø	ND	Ð	ND	QN	ND
MW-31	QN	Ø	QN	Ø	ND	Ø	ı	Ð	ND	ND	Ø	ND	Ø	ND	ND	Q
MW-32	QN	Ø	QN	Ð	ND	Ø	QN	Q	ND	ND	Ø	ND	Ð	ND	QN	ND
MW-34	QN	Ø	ND	Ø	ND	Ø	ND	Ø	ND	ND	Ø	ND	Ø	ND	QN	QN
MW-35	ND	Ð	ND	Ø	ND	Ø	ND	Ø	ND	ND	Ø	ND	Ø	ND	QN	ND
MW-36	QN	Ø	QN	Ø	ND	Ø	ND	Q	QN	QN	Ø	ND	Q	QN	QN	ND
MW-37	QN	QN	QN	QN	QN	Ø	ND	Ø	ND	QN	Ø	ND	QN.	ON	QN	QN
MW-38	ΩN	Q.	QN	QN	QN	Ø	ND	Q	QN	QN	Ø	QN	QN	QN	QN	ı
MW-39	QN	QN	QN	QN	QN	Ø	ND	Ø	QN	QN	Ø	ND	QN.	QN	QN	QN
MW-40	QN	QN	QN	QN	QN	Ø	ı	Q	QN	QN	Ø	ND	QN	QN	QN	ΩN
MW-41	QN	Ø	QN	QN	QN	Ø	ND	Ø	QN	QN	Ø	ND	QN	ND	QN	QN
MW-42	QN	QN	QN	QN	QN	Ø	ND	Ø	ND	QN	Ø	ND	QN.	ON	QN	QN
RW-1	ΩN	Q.	QN	QN	QN	Ø	ı	Q	QN	QN	Ø	QN	QN	QN	QN	ΩN
RW-2	3.02	2.12	3.34	2.70	2.83	4.28	ı	2.64	2.97	3.41	5.54	5.28	5,44	2.82	4.19	4.52
RW-3	1.64	2.17	2.09	1.64	2.37	4.27	2.92	4.14	1.39	2.14	4.31	2.23	2.23	1.81	3.28	3.41
RW-4	2.02	2.22	2.93	2.03	2.51	2.82	2.31	1.99	1.09	2.02	3.65	3.66	3.53	3.53	1.43	135
RW-5	2.47	2.66	3.21	2.53	1.92	1.96	5.64	4.18	2.03	5.79	4.87	4.69	4.75	0.70	0.85	0.91
RW-6	0.67	0.73	0.74	92'0	0.74	0.77	0.65	99'0	0.65	0.61	87.0	1.96	2.35	0.71	1.19	1.14
RW-8**	ı	ı	ı	ı	ı	1	ı	1	ı	ı	ı	ı	ı	2.14	2.93	2.92
RW-9	2.75	3.09	3.81	2.42	3.46	4.62	4.37	3.52	2.68	3.23	3.04	4.82	4.79	4.28	89'5	5.65
RW-10	3.74	3.66	3.67	4.69	4.77	4.46	5.32	4.45	4.12	4.12	5.71	3.80	3.95	3.65	4.96	5.04
RW-11	3.08	2.94	000			ĺ	İ									
			3.05	2.45	3.07	4.65	4.39	3.59	3.24	3.62	3.43	3.66	3.67	3.00	3.87	3.97

Notes
Data Recorded usi
mit = LAMP, obser
NI = Not Instant
ND = Not Detected
See = Estimated Val
es = Well vegtipped
= = Data not recorr
Wells were gauged

Attachment A: Apparent Thickness of LINAPL Former NuHart Plastic Manufacturing Site, NYSDEC #224136 280 Franklin Street, Brooklyn, NY

	Oct-12 Sep-12	0.33 3.13	3.41 5.58	3.49 2.14	1.84 1.83	ON ON	ND ND	ND ND	ON ON	0.76 2.67	0.24 0.20	3.15 3.80	2.04 4.15	0.18 1.80	ND ON	ND ND	4.40 3.96	2.61 4.02	ND ND	IN IN	IN	IN IN	NI	N NI	IN IN	IN IN	NI	NI	NI	ND ND	1.50 5.85	3.50 3.88	3.45 3.35	1.88	0.22 0.06	1	2.98 5.33					
2012	Nov-12 (	0.31	3.50	-	2.00	ND	ND	QN	QN	660	Q	3.39	2.89	0.21	QN	QN	7.86		66'0	Z	N	N	N	N	N	N	N	N	N	IN	IN	N	N	ND	1.92	2.84	1	3.00	0.00	1	3.83	
	Dec-12	080	4.11	1	1.36	QN	ND	QN	QN	1.56	0.20	1.38	4.23	81.0	QN	QN	2.82	1.62	QN	Z	Z	Z	N	Z	Z	N	N	Z	Z	N	N	Z	Z	ND	2.52	3.58	2.95	2.35	0.15	1	3.08	
	Jan-13	0.44	3.00	ı	1.30	ND	ND	ND	QN	-	0.25	1.35	4.10	1.20	QN	QN	3.70	2.45	ND	ND	ND	N	N	N	N	IN	IN	N	N	IN	IN	N	N	ND	4.20	3.70	3.05	1	0.40	ı	3.50	
	Feb-13	0.44	4.32	ı	5.45	QN	ND	QN	ND	1.07	0.10	1.10	3.75	1.15	QN	QN	4.34	1.00	QN	QN	QN	Z	Z	Z	Z	Z	N	N	Z	N	N	Z	Z	ND	3.75	3.34	3.00	ı	0.21	ı	3.11	
	Mar-13	19'0	2.39	ı	4.92	QN	QN	QN	QN	0.32	10.0	1.20	3.43	0.62	QN	QN	3.96	2.33	QN	QN	ND	N	N	N	N	N	N	N	N	IN	IN	N	N	ND	3.48	3.20	3.15	1	0.50	1	2.62	
	Apr-13	650	3.00	ı	1.92	QN	QN	QN	QN	-	0.02	3.32	3.38	050	QN	QN	3.96	2.86	QN	QN	QN	Z	Z	Z	Z	Z	N	Z	Z	N	N	Z	Z	-	2.92	3.90	3.06	2.62	0.45	ı	4.40	
m	ſ	2.22	3.92	2.82	1.06	QN	ND	QN	QN	0.70	0.07	1.37	3.66	98'0	QN	QN	3.58	3.69	QN	QN	QN	Z	Z	Z	Z	Z	N	Z	Z	IN	IN	Z	Z	ND	2.96	1.44	1.08	0.51	80.0	3.64	2.37	
2013	Aug-13	3.49	5.08	2.42	2.77	QN	QN	QN	QN	2.14	0.05	3.33	4.37	1.12	Q	QN	4.41	4.18	QN	Ð	Ø	QN	ND	QN	2	Ø	N	Z	N	N	N	Z	Z	N	4.07	2.96	2.75	69'0	0.10	4.59	4.09	
	Sep-13	##	0.0	##	9.0	QN	QN	QN	QN	9.0	##	9.0	88	##	QN	QN	88	##	QN	QN	QN	QN	QN	QN	QN	QN	N	Z	Z	N	N	Z	Z	ND	##	0.0	##	0.0	##	##	##	
	Oct-13	82.0	5.54	2.00	4.00	ND	ND	ND	QN	3.34	0.19	4.11	4.66	0.50	QN	QN	4.01	4.62	QN	ND	QN	QN	QN	QN	ND	QN	N	Z	N	N	IN	N	Z	ND	3.86	1.68	1.46	0.54	19'0	4.13	3.08	
	Nov-13	99'0	7.17	2.76	4.70	Ø	Ø	Ð	R	3.19	0.22	4.90	3.72	69'0	QN.	QV	5.56	4.47	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Q.	N	N	Z	N	IN	Z	Z	ND	5.09	3.33	2.30	6.79	1.30	3.92	4.88	
	Dec-13	0.30	6.46	2.89	4.78	ND	ND	ND	ND	3.11	0.23	5.07	3.13	1.07	QN	QN	99'5	4,44	ND	ND	ND	QN	QN	QN	ND	ND	IN	IN	IN	IN	N	N	N	ND	3.19	3.60	2.67	09'0	0.94	2.46	5.25	
	Jan-14	0.22	1	ı	ı	ı	ı	ı	ı	ı	ı	4.19	3.37	1.22	QN	_	-	434	ı	Ø	QV.	ı	ı	ı	Ø	QN	IN	IN	IN	IN	IN	N	N	ND	2.80	4.60 (est)	2.45	0.52	0.41	2.37	4.34	
	Feb-14	0.23	2.98	3.43	ı	ı	T	ı	ı	0.38	0.10	2.58	2.48	0.75	QN	-	-	3.80	ı	QN	QN	ı	ī	ı	QN	ND	N	N	N	IN	IN	Z	Z	ND	2.31	2.28	3.27	0.43	96.0	98'0	2.71	
	Mar-14	Trace	2.80	2.84	0.17	Ø	Ø	Ð	Ø	0.30	10.0	2.90	2.47	98'0	Q	Ø	3.75	3.48	Ð	Ø	Ø	Ø	Ø	Ø	Ø	Ø	N	N	N	IN	IN	N	N	ND	3.05	2.90	3.25	0.93	1.28	1.47	2.90	
	Apr-14	10.0	3.14	ı	0.17	QN	ND	QN	QN	19'0	10.0	1.47	2.69	0.74	QN	QN	3.91	2.71	QN	QN	QN	QN	QN	QN	ND	ND	Z	Z	Z	N	Z	Z	Z	ND	1.30	1.58	181	0.12	0.45	99'0	1.02	
2014	May-14	-	-	-	1	1	1	1	ı	1	1	1	1	-	-	-	-	1	1	1	1	1	1	1	1	-	N	Z	N	IN	IN	Z	Z	-	-	1	ı	-	ı	1	ı	
	Jun-14	Trace	3.39	##	10.0	QN	ND	QN	QN	0.45	Trace	2.06	1.99	0.85	QN	QN	3.48	3.02	QN	QN	QN	QN	QN	QN	QN	ND	Z	Z	Z	N	Z	Z	Z	ND	0.11	4.12	2.86	0.17	62'0	2.95	4.14	
	Jul-14	1.24	1.97	##	09'0	QN	QN	QN	QN	0.0	66'0	2.92	4.90	0.54	QN	QN	3.65	4.50	QN	QN	QN	QN	QN	QN	QN	ND	IN	IN	N	IN	IN	N	N	ND	4.52	3.56	##	0.17	82'0	88	4.92	
	Aug-14	1.90	5.03	##	2.16	QN	T	ı	QN	2.32	0.03	1.71	4.64	1.02	QN	QN	4.02	3.70	QN	QN	QN	QN	QN	QN	QN	ND	ND	QN	Z	N	N	Z	Z	ND	4.53	3.45	2.88	0.43	0.64	4.48	4.59	
	Sep-14	1.75	4.79	ŘŘ	2.01	ND	QN	QN	ND	2.19	1	1.87	3.62	1.03	QN	QN	3.16	3.84	QN	ND	QN	QN	QN	QN	QN	ND	ND	QN	QN	QN	ND	N	N	ND	4.52	3.50	2.78	0.85	0.71	4.01	4.81	
Well Number		MW 4	MW - 5	MW - 6	MW - 7	MW - 8	MW- 12	MW-13	MW- 14	MW- 15	MW- 16	MW-20	MW-21	MW-22	MW-23	MW-24	MW- 25	MW-26	MW- 27	MW-28	MW-29	MW-30	MW-31	MW-32	MW-34	MW-35	MW-36	MW-37	MW-38	MW-39	MW - 40	MW-41	MW-42	RW-1	RW - 2	RW-3	RW-4	RW - 5	RW - 6	RW-8**	RW-9	

Notes
Data Recorded usi
mit = LAMP, obser
NI = Not Instant
ND = Not Detected
See = Estimated Val
es = Well vegtipped
= = Data not recorr
Wells were gauged



SECTECHNICAL

ENVIRONMENTAL

FCOLOGICAL

WATER

CONSTRUCTION MANAGEMENT

GZA GeoEnvironmental of NY 104 West 29th Street 10th Floor New York, NY 10001 T: 212.594.8140 F: 212.279.8180 www.gza.com



July 2, 2018 File No. 12.0076485.00

Via email: yukyin.wong@dec.ny.gov Mr. Bryan Wong New York State Department of Environmental Conservation Division of Environmental Remediation, Region 2 47-40 21<sup>st</sup> Street Long Island City, New York 11101

Re: Project Status Report

Former NuHart Plastic Manufacturing Site # 224136

280 Franklin Street Brooklyn, New York

Dear Mr. Wong:

Goldberg Zoino and Associates of New York, PC d/b/a GZA GeoEnvironmental of New York is transmitting this Project Status Report on behalf of Dupont Street Developers, LLC for the above referenced Site. Copies of this Project Status Report have also been provided to Dawn Hettrick of the New York State Department of Health. The Project Status Report is for June 2018. If you have any questions, please contact us at 973-774-3302 or 973-774-3307.

Sincerely,

GZA GeoEnvironmental of New York,

Steven Roland, P.E. Senior Consultant

Ernest R. Hanna, P.E.

Consultant Reviewer

Ernest

Cc:

Dawn Hettrick (NYSDOH)
Dupont Street Developers, LLC
Joseph Brunner
Jane O'Connell (NYSDEC)

Wendy A. Marsh

Email: dawn.hettrick@health.ny.gov

David M. Winslow, Ph.D., P.G.

Email: bojinzhu@gmail.com Email: yb321@yahoo.com

Principal

Email: jane.oconnell@dec.ny.gov Email: wmarsh@hancocklaw.com



GEOTECHNICAL

ENVIRONMENTAL

ECOLOGICAL

WATER

CONSTRUCTION MANAGEMENT

GZA GeoEnvironmental of NY 104 West 29th Street 10th Floor New York, NY 10001 T: 212.594.8140 F: 212.279.8180 www.gza.com



This status report summarizes activities conducted at the Former NuHart Plastic Manufacturing Site (Site) in June 2018. Activities during this period were conducted by GZA GeoEnvironmental of New York. (GZA). GZA representatives also participated in Site evaluations and communications, and additional activities were conducted by others, as noted below. A Site Plan showing the general Site layout, nearby area, and associated wells is included as Figure 1. Schedule information is presented under each activity discussion.

Interim remedial measure (IRM) activities for monitoring and removal of light non-aqueous-phase liquid (LNAPL) at the Site were performed during the monitoring period in general conformance with the NYSDEC-approved Operation, Maintenance and Monitoring Plan (OM&M Plan) for the product recovery system. Investigation activities for the Site were previously completed as documented in previous project status reports and are not discussed herein.

#### **Interim Remedial Measure Activities**

Monthly IRM routine activities were conducted by GZA on June 15<sup>th</sup> and 19th, 2018. Activities on June 15<sup>th</sup> consisted of manual removal of oil from skimmer holding tanks. The remainder of IRM activities took place on June 19<sup>th</sup>. A table documenting the apparent LNAPL thickness measurements is provided as Attachment A and a Well Location Map showing the extent of LNAPL based on the monitoring date is provided as **Figure 1**.

# **Maintenance Activities**

General maintenance activities were performed, including collection of spent IRM-related absorbent materials in the vicinity of recovery wells, placing new absorbent materials as needed to contain LNAPL, and proper labeling of waste containers used during this IRM event. Both skimming systems associated with recovery wells RW-8 and RW-12 were found to be powered and operational during the Site visit. The RW-12 skimmer continues to have operational issues due to it's age and condition. The high-level shut off switch continues to be problematic, requiring the collected LNAPL to be removed every 3 weeks to prevent an overflow condition. GZA continues to remove the collected oil manually on a scheduled basis every 3-weeks to prevent any overflow.

## Monitoring and LNAPL Removal

Gauging of onsite and offsite monitoring and recovery wells associated with the Site was conducted on June 19th, 2018. Well gauging was conducted from 7:00 am to 12:00 pm. Flood tides were observed with low tide at 8:47AM and high tide at 3:16 PM. (ref. NOAA/NOS/CO-OPS Station ID (8517673) Hunters Point, Newtown Creek, NY). The wells that could not be accessed are noted on **Attachment A**. All wells containing LNAPL are noted, as are wells where LNAPL is absent. No changes were noted in the horizontal extent of the LNAPL. The depths to the water table were variable relative to the depths noted in the May 2018 status report, with some wells showing increases and some wells showing decreases. LNAPL apparent thicknesses were also variable, with increases generally noted in wells where the depth to water decreased.



The skimmer holding tanks were emptied during this event. The amount of LNAPL removed was estimated at 75 gallons, consisting of LNAPL from recovery wells RW-12 (64 gallons) and RW-8 (11 gallons). Based on previous LNAPL estimates, an estimated 3,053 gallons of product have been removed from the subsurface since early 2015, with most of the LNAPL disposed. The removed LNAPL is stored in intermediate bulk container (IBC) tanks located in the Site building, pending pickup and offsite disposal. When the IBC tanks are nearly full, and/or the containerized spent absorbent materials require disposal, the designated waste management company will be contacted and waste disposal requested.

Eastern Environmental Solutions, Inc. (Eastern) is presently contracted to conduct waste management activities for disposal of product from the IBC tanks at the Site. To date, Eastern has transported and disposed an estimated 2,616 gallons of product at the Cycle Chem facility in Elizabeth, NJ as hazardous waste. Waste transport and disposal information will continue to be included in the progress reports following the months during which waste disposal activities occur.

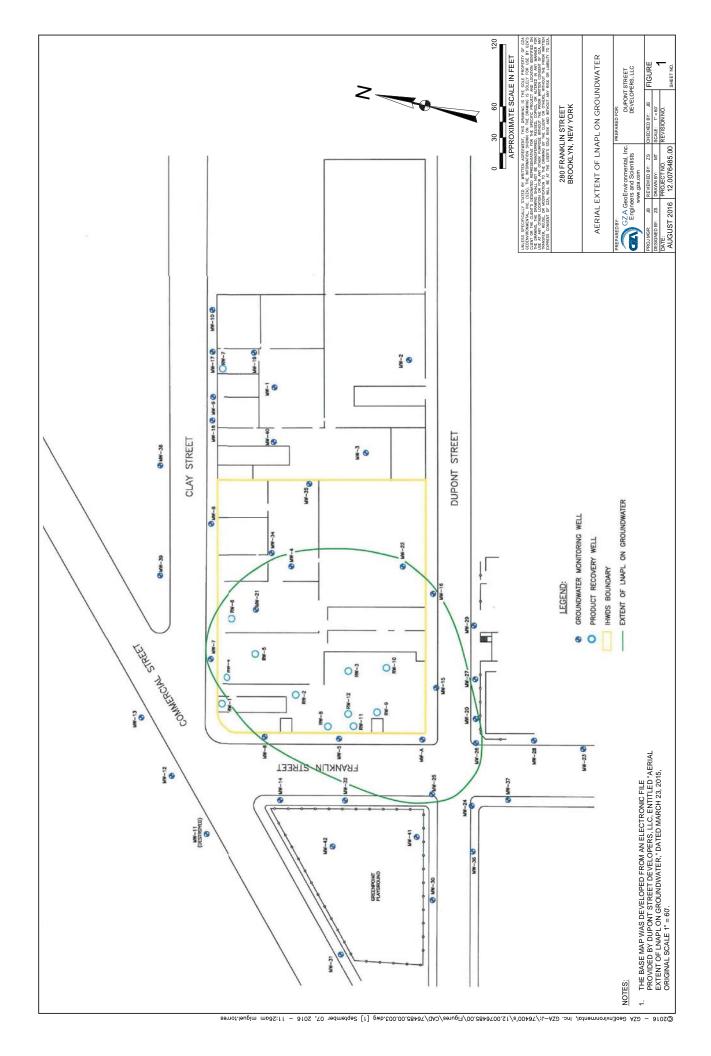
# Site Soil Management Report

Pursuant to a request by the NYSDEC, GZA prepared the Site Soil Management Plan (SSMP) on October 28, 2016 to provide guidance for utility contractors regarding management for soils and groundwater potentially impacted by the Site. This SSMP was followed during the pilot study sampling event.

#### **Attachments**

Attachment A – Apparent Thickness of LNAPL

Figure 1 – Well Location Map showing areal extent of LNAPL on groundwater



# Attachment A: Apparent Thickness of LINAPL Former NuHart Plastic Manufacturing Site, NYSDEC #224136 280 Franklin Street, Brooklyn, NY

Readings taken 6/19/18 between 7:00 am and 12:00 pm (High tide @ 3:16 PM and Low tide @ 8:47 AM)

-	LOW tide @ 0.47 Alvi	0.47 Alvi)																					İ
Well Number	*Depth to Product (feet)	*Depth to Water			2018	-							2017										
			Jun-18	May-18	Apr-18	Mar-18	Feb-18	Jan-18	Nov-17	Oct-17	Sep-17	Aug-17				M	-17 Feb-17	H	Н	Nov-16	Oct-16	Sep-16	Aug-16
MW-4	10.71	10.83	0.12	1.13	99.0	0.73	*	0.92	2.12	0.81	1.76	1.73						_	_	1.00	1.18	1.35	1.71
MW - 5	96'6	11.61	1.66	1.83	2.77	2.19	2.21	4.65	5.83	2.19	4,44	4.4						_	_	4.43	3.64	3.22	4.31
MW – 6	8.95	9.5	0.55	0.50	2.47	0.74	00	##	##	1.22	3.19	3.15					H	-	H	666	##	66	66
MW - 7	9.03	10.92	1.89	1.99	1.80	2.03	2.55	3.32	4.91	1.48	1.45	1.41						_	_	1.73	0.91	0.04	1.89
MW - 8	ND	62.6	QN	QN	ND	ND	QV	ND	ND	ND	QN	QV.						Н		QV.	ND	ND	ND
MW- 12	QN	7.41	ON	ON.	ND	ND	Q.	ND	ND	ND	QN	QN					Н	H	Н	ON.	ND	ND	ND
MW- 13	QN	7.95	ON	ON.	ND	ND	Q.	ND	ND	ND	QV	ND					Н	H	Н	ON.	ND	ND	ND
MW- 14	QV	69'8	QN	QV.	QN	QN	Ð	ON	ND	ND	Ð	QN QN					H		H	QN.	ND	QN	ND
MW- 15	10.59	10.63	0.04	0.04	0.07	0.07	80'0	3.16	1.78	0.31	0.29	0.26					H	H	H	080	0.20	0.17	0.81
MW- 16	11.25	11.31	90'0	0.10	0.13		0.1	0.34	0.25	0.35	0.37	0.35					H	H	H	Ð	Q	ND	ND
MW-20	10.58	11.98	1.4	1.55	2.52	17.13	1.02	3.15	3.99	2.52	2.58	2.63						H	H	3.28	2.90	3.16	2.89
MW-21	11.15	12.58	1.43	1.42	1.62	1.38	2.29	3.83	4.79	3.26	3.35	2.13					H	H	H	3.32	1.25	2.39	3.61
MW- 22	11.97	12.94	76.0	0.89	0.76	1711	0.28	0.37	1.77	1.25	1.24	121						H	H	0.38	0.30	0.01	0.51
MW-23	Ð	QN	Q.	QV	QN	QN	QV	QN	QN	QN	Q	Ð				H	H	H	H	Ð	QN	QN	ND
MW-24	Ð	QN	Ð	QV	QN	QN	Q	QN	QN	ND	Q.	Ð					-	H	H	Ø	ND	ND	ND
MW-25	10.08	12.93	2.85	2.89	4.03	3.45	3,44	3.66	4.54	4.03	4.05	4.02								3.60	4.20	3.79	3.65
MW-26	10.26	11.01	0.75	2.35	3.14	2.48	3.19	3.95	5.59	3.81	3.82	3.79					H	H	H	3.56	4.00	3.28	4.26
MW-27	Q	10.49	QN	ON.	QN	QN	Q.	ON	QN	ΩN	QV	QN					H		H	Q	QN	QN	ND
MW-28	QV	10.88	QN	QV.	QN	QN	Ð	QN	QN	QN	Ð	QN					H		©.	QN.	ND	QN	ND
MW-29	ND	10.99	ON	QN	ND	ND	QV	ND	ND	ND	QN	QV.						Н		QV.	ND	ND	ND
MW-30	ND	98'6	QN	QN	ND	ND	QV	ND	ND	ND	QN	QV.						Н		QV.	ND	ND	ND
MW-31	ON.	90'6	QN	QV	ND	ND	QV	ND	ND	ND	QN	Q	H	H	-		Н	H	Н	1	ı	1	1
MW-32	ON.	9.87	ON.	QV	ND	ND	QV	ND	ND	ND	QV	Q	H	H	-		Н	H	Н	ON	ND	ND	ND
MW-34	ON	11.16	QN	QN	ND	ND	QN	ND	ND	ND	QV	QV.						Н		ND	ND	ND	ND
MW-35	QN.	14.28	Ø	Ø	QN	ND	QN.	QN	QN	QN	Ð	QV								Q.	QN	ND	ND
MW-36	QN	10.67	QN	QV.	ND	ND	QV.	QN	ND	ND	QV	QV Qv	H	H	H	ND	ON	ND	QN	QN	ND	ND	ND
MW-37	ND	11.05	QN	ON.	ND	ND	QV	ND	ND	ND	QN	QV.						Н		Q.	ND	ND	ND
MW-38	ND	9.41	QN	ON.	ND	ND	QV	ND	ND	ND	QV	ND QN						Н		1	-	-	1
MW-39	QN	8.53	Q.	Ø	QN	ND	Ð	QN	QN	ND	Ð	Ð								Ð	ND	ND	ND
MW-40	ON	96'9	ON	QN	QN	ND	QN	ND	ND	ND	QN	Q.						Н		QN	ND	ND	ND
MW-41	ND	9.81	QN	QN	ND	ND	QV	ND	ND	ND	QN	QV.						Н		QV.	ND	ND	ND
MW-42	Ø	9.07	QV	QN	QN	QN	Ø	ON	QN	ND	Q	Q	-	-	4	-	-	-	-	N <sub>D</sub>	ND	QN	ND
RW-1	Ø	8.84	QN	QV	QN	ND	QN.	ND	QN	ND	QV	QN		4	-		4	-	4	Q	ND	ND	QN
RW-2	12.05	12.11	90'0	80'0	1.65	0.08	5.52	4.01	5.19	0.56	0.58	0.53		-	-	-	-	-	4	1.18	1.26	1.35	1.88
RW-3	14.97	17.05	2.08	2.03	2.52	2.12	3.03	QN	3.31	3.17	3.15	3.22								3.95	2.40	2.50	3.08
RW - 4	12.10	15.06	2.96	2.97	3.80	3.01	02.39	3.06	4.32	4.33	4.17	4.18								2.80	2.77	3.30	2.73
RW - 5	11.56	12.00	0.44	0.33	990	0.34	4.64	0.49	4.49	5.28	5.27	5.26								3.05	0.42	0.36	0.50
RW - 6	11.89	12.72	0.83	0.88	96'0	0.91	06:00	2.61	1.64	0.73	9.0	1.61								89'0	0.87	0.92	1.46
RW-8**	13.9	13.92	0.02	0.02	0.03	0.03	96'0	1.99	_	1.15	2.2	3.62					Н	Н	H	-	-	1	1
RW - 9	13.37	13.48	0.11	2.38	2.28	1.51	2.88	4.32	5.58	3.72	3.77	3.69							3.09	3.57	2.45	2.35	3.19
RW - 10	13.10	14.62	1.52	1.60	3.70	0.66	3.48	4.64	4.28	3.65	3.67	3.71						4.15		3.45	3.80	3.36	4.44
RW-11	13.36	15.87	2.51	2.52	4.34	2.41	2.50	5.01	5.5	2.97	4.57	3.93	2.33	3.00 2.	2.92 3.00	3.55	5 3.73	H	H	2.04	2.43	2.12	3.66
RW-12 **	13.04	13.15	0.11	0.02	2.61	0.02	1.12	1.5	5.96	3.65	5.4	2.68						_	-	I	_	1	1
																							Ì

Data Recerbed using an oil/water interface probe, measurements from the tops of well castings

## = 1.1AVI Sheered, apparent Brideness and determinded

NI = Not Installed

NI = Not Installed

NI = Not Installed

Well WAN VI. MW. A. MW. A. MW. A. MW. I. A.

	- 1	parent 1 nk	Apparent I inceness of LNAPL (feet)	(waster waster)														
Well Number	2016	ľ					I			Ī			2015					
	Jul-16	Jun-16	May-16	Apr-16	Mar-16	Feb-16	Jan-16	Dec-15	Nov-15	Oct-15	Sep-15	Aug-15	Jul-15	Jun-15	May-15	Apr-15	Mar-15	Jan-15
MW - 4	1.73	1.80	1.53	1.73	1.43	1.85	1.77	1.96	2.04	1.99	1.77	2.22	4.27	0.35	0.44	1	0.56	1
MW - 5	4.03	429	3.07	3.18	3.14	1.85	3.24	4.83	5.41	4.16	426	4.45	4.22	2.30	2.41	2.55	3.10	4.40
MW – 6	ĕĕ	ĕĕ	ŧθ	ññ	ññ	θθ	ññ	ĕĕ	ĕĕ	88	ññ	ññ	θθ	2.30	ĕĕ	ññ	66	0.0
MW - 7	1.58	2.22	2.11	1.90	1.66	2.31	2.47	3.44	3.31	2.58	1.46	1.28	66'0	1.58	ND	1.94	1.79	##
MW – 8	QN	ND	QN.	ND	ND	Ð	Ð	ND	QN	Ð	ND	ND	Ð	Q.	ND	ND	Ø	1
MW- 12	ND	N	Ø	ND	I	ı	ı	ND	QN	ı	1	ı	ı	Ø	ND	ND	Ø	I
MW-13	ND	N	©.	ND	ND	ı	ı	ND	QN	ı	1	ı	ı	Q	ND	ND	Ø	I
MW- 14	QN	QN	Ø	QN	ND	Ø	Ø	ND	QN	Ð	ND	ND	Ø	Q	ND	ND	Ø	Q
MW-15	0.07	0.48	0.22	0.71	0.03	0.04	09'0	3.08	3.07	1.97	1.05	1.05	Ø	1.24	1.21	1.56	1.67	1.71
MW-16	0.01	0.25	0.02	0.01	0.02	0.16	0.02	0.11	0.02	0.12	0.05	0.05	0.14	0.13	0.15	0.03	80'0	0.02
MW-20	2.88	2.85	2.22	2.49	2.43	1.99	2.46	3.52	3.02	3.33	3.25	3.12	2.88	2.58	2.79	3.84	4.38	5.13
MW-21	2.96	2.95	2.63	4.18	2.68	2.42	2.97	4.46	3.85	4.51	3.63	3.32	2.97	2.53	2.77	2.98	3.46	3.23
MW- 22	0.87	0.62	0.45	0.48	0.44	0.15	0.22	1.33	1.01	0.49	1.17	1.04	62.0	98'0	0.84	0.74	1.33	1.27
MW-23	QN	QN	QN	QN	ND	Ø	Ø	QN	QN	Ø	ND	ND	Ø	Q	QN	ND	Ð	g
MW-24	ND	ND	QN.	ND	ND	Ø	Ð	ND	ND	Ð	ND	ND	Ø	QV	ND	ND	Q	ND
MW-25	4.01	3.75	3.55	3.33	3.42	3.32	3.43	3.68	3.53	3.63	3.53	3.68	3.53	2.81	3.24	3.36	1.07	1.03
MW-26	3.58	3.82	3.41	3.37	2.97	3.82	3.41	4.23	4.08	3.77	4.00	3.70	3.65	3.18	3.33	3.64	4.14	4.11
MW-27	QN	ND	Ø	QN	QN	QN	QN	QN	ND	Ø	QN	QN	QN	QN	QN	ND	QN.	QN
MW-28	ND	ND	QΝ	QN	QN	QN	QN	QN	QN	QN.	ND	QN	QN	QN	QN	ND	QN	ΩN
MW- 29	QN	ND	Ø	QN	QN	QN	QN	QN	QN	Ø	ND	QN	QN	QN	QN	ND	Ø	N
MW-30	ND	ND	ND	ND	ND	ND	QN	ND										
MW-31	ND	ND	QN	ND	ND	QN.	QN	ND	ı	N	ND	ND	QN.	ND	ND	ND	ND	ND
MW-32	ND	ND	ND	ND	ND	QN.	QN	ND	ND	ND	ND	ND	QN.	ND	ND	ND	ND	ND
MW-34	ND	ND	ΩN	ND	QN	QV	QN	QN	ND	Q	ND	ND	QV	QN	QN	ND	Q	ND
MW-35	QN	QN	ΩN	ΩN	QN	QN	QN	QN	QN	Q	ND	QN	QN	QN	QN	ND	Ø	QN
MW-36	ND	ND	QΝ	QN	QN	QN	QN	QN	QN	Ø	ND	QN	QN	QN	QN	ND	Ø	QN
MW-37	ND	ND	QN.	ND	ND	Ð	Ð	ND	QN	Ð	ND	QN	Ð	Ø	ND	ND	Q.	ND
MW-38	ND	ND	ND	ND	ND	QN.	QN	ND	ND	ND	ND	ND	QN.	ND	ND	ND	ND	1
MW-39	QN	ND	QΝ	QN	QN	QN	QN	QN	QN	QN.	ND	QN	QN	QN	QN	ND	QN	QN
MW-40	QN	QN	ΩN	ΩN	QN	QN	QN	QN	ı	Q	ND	QN	QN	QN	QN	ND	Ø	QN
MW-41	ND	ND	ND	ND	ND	ND	QN	ND										
MW-42	ND	ND	ND	ND	ND	ND	QN	ND										
RW-1	ND	ND	ND	ND	ND	QN.	QN	ND	I	ND	ND	ND	QN.	ND	ND	ND	ND	ND
RW-2	2.05	2.41	3.02	2.12	3.34	2.70	2.83	4.28	ı	2.64	2.97	3.41	5.54	5.28	5.44	2.82	4.19	4.52
RW - 3	1.97	2.49	1.64	2.17	2:09	1.64	2.37	4.27	2.92	4.14	1.39	2.14	4.31	2.23	2.23	1.81	3.28	3.41
RW-4	2.65	2.32	2.02	2.22	2.93	2.03	2.51	2.82	2.31	1.99	1.09	2.02	3.65	3.66	3.53	3.53	1.43	1.35
RW-5	4.97	2.76	2.47	2.66	3.21	2.53	1.92	1.96	5.64	4.18	2.03	5.79	4.87	4.69	4.75	0.70	0.85	0.91
RW - 6	1.29	0.81	19.0	0.73	0.74	92.0	0.74	0.77	9.0	99'0	0.65	0.61	0.78	1.96	2.35	0.71	1.19	1.14
RW-8**	1	1	1	1	1	I	I	1	I	ı	1	1	I	Ι	1	2.14	2.93	2.92
RW - 9	2.15	3.18	2.75	3.09	3.81	2.42	3.46	4.62	4.37	3.52	2.68	3.23	3.04	4.82	4.79	4.28	5.68	5.65
RW - 10	3.91	3.69	3.74	3.66	3.67	4.69	4.77	4.46	5.32	4.45	4.12	4.12	5.71	3.80	3,95	3.65	4.96	5.04
RW-11	2.98	3.43	3.08	2.94	3.05	2.45	3.07	4.65	4.39	3.59	3.24	3.62	3.43	3.66	3.67	3.00	3.87	3.97
RW-12 **	ı	ı	ı	ı		ı	ı	I	ı	ı	ı	ı	ı	ı	ı	ı	ı	I

# Attachment A: Apparent Thickness of LINAPL Former NuHart Plastic Manufacturing Site, NYSDEC #224136 280 Franklin Street, Brooklyn, NY

Well Number					2014									2013							2012		
	Sep-14	Aug-14	Jul-14	Jun-14	May-14	Apr-14	Mar-14	Feb-14	Jan-14	Dec-13	Nov-13 C	Oct-13	Sep-13	Aug-13	Jul-13	Apr-13 3	Mar-13	Feb-13	Jan-13	Dec-12	Nov-12	Oct-12	Sep-12
MW-4	+	1.90	1.24	+	. 1	0.01	Trace	0.23	0.22	+	+	0.78	##	3.49	+	┿	+	+	0.44	0.80	0.31	0.33	3.13
MW - 5	4.79	5.03	1.97	3.39	ī	3.14	2.80	2.98	1	6.46	7.17	5.54	##	5.08	3.92	3.00	2.39	4.32	3.00	4.11	3.50	3.41	5.58
MW - 6	0.0	0.0	00	66	ı	ı	2.84	3.43	1	2.89	2.76	2.00	66	2.42	2.82	1	1	1	ı	ı	ı	3.49	2.14
MW-7	2.01	2.16	09'0	0.01	ī	0.17	0.17	1	1	4.78	4.70	4.00	##	2.77	1.06	1.92	4.92	5.45	1.30	1.36	2.00	1.84	1.83
MW - 8	QN	ND	Ð	Ø	ı	ND	Q	1	1	QN	Ð	QN	ND	Ð	ND	QN	Ð	QN	ND	QN	Ð	ND	Ñ
MW- 12	QN	1	Ø	Ø	ı	ND	Q	ı	ı	ND	Ø	QN	ND	Ð	ND	QN	Q	ND	ND	ND	Q	QN	Q
MW- 13	QN	1	Ø	Ø	ı	ND	Q	ı	ı	ND	Ø	QN	ND	Ð	ND	QN	Q	ND	ND	ND	Q	QN	Q
MW- 14	QN	ND	Q	Q	ı	ND	QN	1	1	ND	Q	QN	ND	Ø	ND	QN	Q	QN	ND	QN	Q	ND	N
MW- 15	2.19	2.32	00	0.45	ı	0.61	0.30	0.38	1	3.11	3.19	3.34	66	2.14	0.70		0.32	1.07		1.56	66'0	92.0	2.67
MW- 16	1	0.03	66'0	Trace	ı	10.0	10.0	0.10	1	0.23	0.22	0.19	##	0.05	0.07	0.02	10.0	0.10	0.25	0.20	Ð	0.24	0.20
MW-20	1.87	1.71	2.92	2.06	ı	1.47	2.90	2.58	4.19	5.07	4.90	4.11	##	3.33	1.37	3.32	1.20	1.10	1.35	1.38	3.39	3.15	3.80
MW-21	3.62	4.64	4.90	1.99	ı	2.69	2.47	2.48	3.37	3.13	3.72	4.66	##	4.37	3.66	3.38	3.43	3.75	4.10	4.23	2.89	2.04	4.15
MW- 22	1.03	1.02	0.54	0.85	1	0.74	98'0	0.75	1.22	1.07	69'0	0.50	0.0	1.12	0.86	0.50	0.62	1.15	1.20	0.18	0.21	0.18	1.80
MW-23	QN	ND	Ð	Ø	ı	ND	Q	ND	QN	QN	Q	QN	QN	Ð	QN	QN	Ð	QN	QN	QN	Ð	ND	Ñ
MW-24	QN	ND	Ð	Ð	1	ND	Ð	1	ı	QN	Ð	QN	QN	Ø	ND	QN	Ð	QN	ND	ND	Ð	QN	N
MW-25	3.16	4.02	3.65	3.48	ı	3.91	3.75	1	1	5.66	5.56	4.01	##	4.41	3.58	3.96	3.96	4.34	3.70	2.82	7.86	4.40	3.96
MW-26	3.84	3.70	4.50	3.02	ı	2.71	3.48	3.80	4.34	4.44	4.47	4.62	#	4.18	3.69	2.86	2.33	1.00	2.45	1.62		2.61	4.02
MW-27	Q	ND	Ð	Ð	ı	QN	Q	ı	ı	QN	Ð	QN	QN	Ð	ND	QN	Ð	QN	QN	QN	660	QN	Ñ
MW-28	QN	ND	Ð	Ð	ı	QN	Q	QN	Q	QN	Ð	QN	QN	Ð	ND	QN	Ð	QN	ND	Z	Z	N	Z
MW-29	QN	QN	Ð	Ð	ı	ND	Ð	ND	ND	ND	Ð	QN	ND	Ð	ND	QN	Ð	QN	ND	Z	N	N	Z
MW-30	QN	ND	Ð	Ð	1	ND	Q	1	ı	QN	Ð	QN	QN	Q	N	N	Z	Z	N	Z	N	N	Z
MW-31	QN	ND	Ø	Ø	ı	ND	Q	ı	ı	ND	Ø	QN	ND	Ð	IN	N	Z	N	N	Z	N	N	Z
MW-32	QN	ND	Ø	Ø	ı	ND	Q	ı	ı	ND	Ø	QN	ND	Ð	IN	N	Z	N	N	Z	N	N	Z
MW-34	QN	QN	Ð	Ð	ı	ND	Ð	QN	ND	ND	Ð	QN	ND	Ð	N	Z	Z	Z	Z	Z	Z	Z	Z
MW-35	QN	ND	Ð	Ø	ı	ND	QV	ND	ND	ND	Q	QN	QN	Ð	N	Z	Z	N	N	Z	N	Z	Z
MW-36	QN	ND	Z	Z	N	N	Z	N	N	Z	Z	N	N	Z	IN	Z	Z	N	N	Z	N	Z	Z
MW-37	QN	QN	Z	N	IN	N	N	N	N	Z	N	IN	N	ĸ	N	N	Z	N	N	Z	N	N	Z
MW-38	QN	N	Z	N	IN	N	N	N	N	Z	N	IN	N	ĸ	N	N	Z	N	N	Z	N	N	Z
MW-39	ND	IN	Z	N	IN	N	N	IN	N	Z	Z	IN	N	N	N	N	Z	Z	IN	Z	IN	N	N
MW-40	ND	IN	N	IN	IN	IN	N	IN	IN	N	N	IN	IN	IN	IN	N	N	IN	IN	N	IN	IN	N
MW-41	IN	NI	N	N	IN	IN	N	IN	IN	N	N	IN	IN	IN	N	N	N	IN	IN	N	NI	N	IN
MW-42	IN	IN	Z	N	IN	IN	N	IN	N	Z	Z	IN	N	IN	IN	Z	Z	N	IN	Z	IN	N	N
RW-1	QN	QN	Ø	Q	ı	ND	Q	QN	ND	ND	Q	QN	ND	Ø	ND		Q	QN	QN	QN	Q	ND	N
RW-2	4.52	4.53	4.52	0.11	-	1.30	3.05	2.31	2.80	3.19	5.09	3.86	##	4.07	2.96	2.92	3,48	3.75	4.20	2.52	1.92	1.50	5.85
RW-3	3.50	3.45	3.56	4.12	ī	1.58	2.90	2.28	4.60 (est)	3.60	3.33	1.68	88	2.96	1.44	3.90	3.20	3.34	3.70	3.58	2.84	3.50	3.88
RW-4	2.78	2.88	90	2.86	ı	1.81	3.25	3.27	2.45	2.67	2.30	1.46	##	2.75	1.08	3.06	3.15	3.00	3.05	2.95	-	3.45	3.35
RW-5	0.85	0.43	0.17	0.17	-	0.12	0.93	0.43	0.52	09'0	62'0	0.54	88	69'0	0.51	2.62	ı	ı	-	2.35	3.00	1.88	1
RW - 6	0.71	0.64	82'0	62'0	-	0.45	1.28	96'0	0.41	0.94	1.30	0.67	##	0.10	0.08	0.45	0.50	0.21	0.40	0.15	060	0.22	90.0
RW-8 **	4.01	4.48	##	2.95	-	0.65	1.47	98'0	2.37	2.46	3.92	4.13	##	4.59	3.64	-	1	-	-	-	-	-	I
RW - 9	4.81	4.59	4.92	4.14	ı	1.02	2.90	2.71	4.34	5.25	4.88	3.08	66	4.09	2.37	4.40	2.62	3.11	3.50	3.08	3.83	2.98	5.33
RW - 10	3.93	3.74	3.57	3.18	ı	3.38	3.89	3.48	3.80	3.81	3.99	4.11	##	4.11	3.55	1	1	1	1	1	-	1	ı
RW-11	4.43	4.42	4.46	3.87	ı	2.03	2.54	2.59	3.66	4.27	5.48	2.65	##	3.91	3.49	3.15	2.67	3.11	3.50	2.93	4.49	2.58	4.40
W-12 **	ı	ı	ı	ı	ı	ı	ı	ı	1	ī	1	1	ı	ı	1	ı	ı	ı	ı	1	ī	1	1





10 December 2018 File No. 133110-002

Via Email: yukyin.wong@dec.ny.gov
New York Start Department of Environmental Conservation
Division of Environmental Remediation, Region 2
47-40 21st Street
Long Island City, New York 11101

Attention: Mr. Bryan Wong

Subject: Project Status Report

Former NuHart Plastics Manufacturing Site # 224136

280 Franklin Street Brooklyn, New York

Dear Mr. Wong:

Haley & Aldrich of New York is pleased to present this Project Status Report on behalf of Dupont Street Developers, LLC for the above referenced Site. Copies of this Project Status Report have also been provided to Dawn Hettrick of the New York State Department of Health. The Project Status Report is for October 2018 to November 2018. If you have any questions, please contact us at 646-518-7735.

Sincerely yours,
HALEY & ALDRICH OF NEW YORK

James Bellew Senior Associate

CC:

Dawn Hettrick (NYSDOH)
Dupont Street Developers, LLC
Jane O'Connell (NYSDEC)
Wendy A. Marsh

Email: bojinzhu@gmail.com Email: jane.oconnell@dec.ny.gov

Email: dawn.hettrick@health.ny.gov

Dupont Street Developers, LLC 10 December 2018 Page 2

This status report summarizes activities conducted at the Former NuHart Plastic Manufacturing Site (Site) from October 2018 through November 2018. Activities during this period were conducted by Haley and Aldrich of New York (HANY). A Site Plan showing the general Site layout, nearby area, and associated wells is included as Figure 1.

Interim remedial measure (IRM) activities for monitoring and removal of light non-aqueous-phase liquid (LNAPL) at the Site were performed during the monitoring period in general conformance with the NYSDEC-approved Operation, Maintenance and Monitoring Plan (OM&M Plan) for the product recovery system.

# **Interim Remedial Measure Activities**

The IRM routine activities (Monthly) were performed by HANY on 4 December 2018. The apparent LNAPL thickness measurement table is provided as Attachment A. Additionally, a Well Location Map showing the extent of LNAPL based on the monitoring date is shown as **Figure 1**.

# **Maintenance Activities**

General maintenance activities include collection of spent IRM-related absorbent materials in the vicinity of recovery wells, placing new absorbent materials, general housekeeping activities and proper labeling of waste containers generated during this IRM event. Both skimming systems associated with recovery wells RW-8 and RW-12 were found to be powered and operational during the Site visit.

# Monitoring and LNAPL Removal

Gauging of onsite and offsite monitoring and recovery wells associated with the Site was performed and the wells that could not be accessed and/or gauged are identified on **Attachment A**. No changes were observed in the lateral extent of the LNAPL plume. On 4 December 2018, high tide was observed from 7:00 AM to 1:00 PM during the well gauging period (by NOAA/NOS/CO-OPS Station ID (8517673) Hunters Point, Newtown Creek, NY). The depths to the water table were variable relative to the depths noted in the previous status reports, with some wells showing increases and some wells showing decreases. LNAPL apparent thicknesses were also variable, with increases generally noted in wells where the depth to water increased and decreases noted in wells where the depth to water decreased.

The product recovery holding reservoirs were emptied during this event. The amount of LNAPL removed from the wells was estimated at 105 gallons, including LNAPL from the drums associated with the skimmers on recovery wells RW-8 and RW-12. Based on previous LNAPL estimates, an estimated 2,670 gallons of product have been removed from the subsurface since early 2015, with most of the LNAPL disposed. The removed LNAPL is stored in intermediate bulk container (IBC) tanks located in the Site building, pending pickup and offsite disposal. When the IBC tanks are nearly full and/or the containerized spent absorbent materials require disposal, the designated waste management company will be contacted and waste disposal requested.

Eastern Environmental Solutions, Inc. (Eastern) is presently contracted to conduct waste management activities for disposal of product from the IBC tanks at the Site. To date, Eastern has transported and disposed an estimated 2,116 gallons of product at the CycleChem facility in Elizabeth, NJ as hazardous waste. No waste was transported from the Site during this period and transportation and disposal



Dupont Street Developers, LLC 10 December 2018 Page 3

information will continue to be included in the progress reports following the months during which disposal activities occur.

# Feasibility Study and Proposed Remedial Action Work Plan (PRAP)

The Feasibility study prepared by GZA was submitted to the NYSDEC in January 2017. The NYSDEC issued the proposed remedial action work plan (PRAP) in September 2018. A public comment hearing was held on 4 October 2018 to discuss the proposed remedy for the Site. The public comment period ended on 9 November 2018.

# **Site Soil Management Report**

There were no requests for evaluation of potential work in the LNAPL plume area during this period.

# **Attachments**

Attachment A – Apparent Thickness of LNAPL Attachment B – Well Location Map showing areal extent of LNAPL on groundwater



# Attachment A Apparent Thickness of LNAPL



Attachment A: Apparent Thickness of LNAPL
Former NuHart Plastic Manufacturing Site, NYSDEC #224136

280 Franklin Street

Brooklyn, NY

Readings taken 12/04/18 between 8:00 am and 1:00 pm (High tide @ 7:10 AM and Low tide @ 1:02 PM)

																Apparent	Thickness of L	NAPL (feet)															
Well Number	*Depth to Product (feet)	*Depth to Water (feet)				2	018									2017											2016						
	Troduct (leet)	(leet)	Dec-18	Oct-18	Jun-18	May-18	Apr-18	Mar-18	Feb-18	Jan-18	Nov-17	Oct-17	Sep-17	Aug-17	Jul-17	Jun-17	May-17	Apr-17	Mar-17	Feb-17	Jan-17	Dec-16	Nov-16	Oct-16	Sep-16	Aug-16	Jul-16	Jun-16	May-16	Apr-16	Mar-16	Feb-16	Jan-16
MW – 4	ND*	ND*	ND*	ND*	0.12	1.13	0.65	0.73	*	0.92	2.12	0.81	1.76	1.73	1.23	1.77	ND*	1.32	1.61	1.13	1.31	1.30	1.00	1.18	1.35	1.71	1.73	1.80	1.53	1.73	1.43	1.85	1.77
MW - 5	9.39	12.22	2.83	4.12	1.66	1.83	2.77	2.19	2.21	4.65	5.83	2.19	4.44	4.4	3.71	3.54	2.81	2.80	3.13	4.05	3.00	3.55	4.43	3.64	3.22	4.31	4.03	4.29	3.07	3.18	3.14	1.85	3.24
MW - 6	8.05	ND*	##	ND	0.55	0.50	2.47	0.74	##	##	##	1.22	3.19	3.15	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##
MW - 7	8.75	9.68	0.93	0.54	1.89	1.99	1.80	2.03	2.55	3.32	4.91	1.48	1.45	1.41	0.9	0.00	1.50	1.92	2.53	3.71	1.28	0.78	1.73	0.91	0.04	1.89	1.58	2.22	2.11	1.90	1.66	2.31	2.47
MW – 8	ND	9.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW – 12	ND	6.95	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			_													
MW – 13	ND	7.34	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_	T -													
MW – 14	ND	8.25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW – 15	10.47	10.73	0.26	0.12	0.04	0.04	0.07	0.07	0.08	3.16	1.78	0.31	0.29	0.26	0.26	0.24	0.12	0.22	0.28	0.40	0.31	0.20	0.80	0.20	0.17	0.81	0.07	0.48	0.22	0.71	0.03	0.04	0.60
MW - 16	10.79	10.98	0.19	0.20	0.06	0.10	0.13		0.1	0.34	0.25	0.35	0.37	0.35	0.08	0.28	0.03	0.10	0.23	0.20	0.31	ND	ND	ND	ND	ND	0.01	0.25	0.02	0.01	0.02	0.16	0.02
MW - 20	10.14	13.63	3.49	2.51	1.4	1.55	2.52	1.77	1.02	3.15	3.99	2.52	2.58	2.63	2.9	2.83	2.61	2.94	2.33	3.02	3.02	2.88	3.28	2.90	3.16	2.89	2.88	2.85	2.22	2.49	2.43	1.99	2.46
MW – 21	10.90	13.71	2.81	1.73	1.43	1.42	1.62	1.38	2.29	3.83	4.79	3.26	3.35	2.13	1.45	2.75	3.31	3.30	3.04	3.62	7.59	3.27	3.32	1.25	2.39	3.61	2.96	2.95	2.63	4.18	2.68	2.42	2.97
MW – 22	11.70	12.53	0.83	0.69	0.97	0.89	0.76	1.11	0.28	0.37	1.77	1.25	1.24	1.21	0.75	0.66	0.66	0.78	0.64	0.65	0.50	0.51	0.38	0.30	0.01	0.51	0.87	0.62	0.45	0.48	0.44	0.15	0.22
MW - 23	ND	10.83	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW – 24	ND	10.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW – 25	9.76	13.65	3.89	3.44	2.85	2.89	4.03	3.45	3.44	3.66	4.54	4.03	4.05	4.02	3.73	4.09	3.85	3.70	3.74	3.47	3.89	3.62	3.60	4.20	3.79	3.65	4.01	3.75	3.55	3.33	3.42	3.32	3.43
MW – 26	9.79	13.63	3.84	3.45	0.75	2.35	3.14	2.48	3.19	3.95	5.59	3.81	3.82	3.79	3.65	3.42	3.29	3.73	3.64	3.24	3.14	3.20	3.56	4.00	3.28	4.26	3.58	3.82	3.41	3.37	2.97	3.82	3.41
MW - 27	ND	10.21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 28	ND	10.93	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW – 29	ND	10.71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 30	ND	9.45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 31	ND	8.95	ND	ND	ND	ND	ND	ND	_	_	_	_	_	ND																			
MW - 32	ND	9.51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 34	ND	10.86	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW – 35	ND	13.89	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 36	ND	10.34	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 37	ND	10.77	ND	ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND											
MW - 38	ND	8.93	ND	ND	ND	ND	ND	ND	_	_	_	_	_	ND																			
MW - 39	ND	8.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 40	ND	6.25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 41	_	_	_	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND											
MW - 42	ND	8.70	ND*	ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND											
RW - 1	ND	8.42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
RW - 2	12.74	14.37	1.63	5.54	0.06	0.08	1.65	0.08	5.52	4.01	5.19	0.56	0.58	0.53	6.09	6.25	0.42	1.13	2.90	3.09	3.53	1.65	1.18	1.26	1.35	1.88	2.05	2.41	3.02	2.12	3.34	2.70	2.83
RW - 3	14.65	17.28	2.63	3.77	2.08	2.03	2.52	2.12	3.03	ND	3.31	3.17	3.15	3.22	2.28	3.44	2.85	2.71	3.46	2.98	3.10	1.91	3.95	2.40	2.50	3.08	1.97	2.49	1.64	2.17	2.09	1.64	2.37
RW - 4	11.71	15.08	3.37	2.85	2.96	2.97	3.80	3.01	02.39	3.06	4.32	4.33	4.17	4.18	3.1	4.1	03.69	3.65	3.69	3.67	3.05	3.80	2.80	2.77	3.30	2.73	2.65	2.32	2.02	2.22	2.93	2.03	2.51
RW - 5	11.05	ND*	##	ND*	0.44	0.33	0.65	0.34	4.64	0.49	4.49	5.28	5.27	5.26	5.42	3.75	5.00	5.44	5.10	0.70	2.95	1.55	3.05	0.42	0.36	0.50	4.97	2.76	2.47	2.66	3.21	2.53	1.92
RW - 6	11.56	12.29	0.73	1.91	0.83	0.88	0.96	0.91	00.90	2.61	1.64	0.73	0.6	1.61	0.93	5.35	1.05	1.27	1.22	0.90	0.90	0.85	0.68	0.87	0.92	1.46	1.29	0.81	0.67	0.73	0.74	0.76	0.74
RW - 8 **	_	_	_	_	0.02	0.02	0.03	0.03	0.96	1.99	_	1.15	2.2	3.62	1.2	2.34	0.02	0.01	_	_	_	-	_	_	_	_	_	_	_	_		_	
RW – 9	12.90	16.35	3.45	4.52	0.11	2.38	2.28	1.51	2.88	4.32	5.58	3.72	3.77	3.69	2.84	3.25	2.70	2.69	3.50	3.66	2.47	3.09	3.57	2.45	2.35	3.19	2.15	3.18	2.75	3.09	3.81	2.42	3.46
RW - 10	12.66	16.72	4.06	2.46	1.52	1.60	3.70	0.66	3.48	4.64	4.28	3.65	3.67	3.71	3.67	3.78	4.07	3.79	4.27	4.70	4.15	3.86	3.45	3.80	3.36	4.44	3.91	3.69	3.74	3.66	3.67	4.69	4.77
RW - 11	13.09	16.11	3.02	2.21	2.51	2.52	4.34	2.41	2.50	5.01	5.5	2.97	4.57	3.93	2.33	3.00	2.92	3.00	3.55	3.73	2.65	1.90	2.04	2.43	2.12	3.66	2.98	3.43	3.08	2.94	3.05	2.45	3.07
RW- 12 **	_	_	_	_	0.11	0.02	2.61	0.02	1.12	1.5	5.96	3.65	5.4	2.68	0.01	0.03	0.01	0.02	0.80	3.89	_	-	_	_	_	_	_	_	_	_		_	

# Notes

Data Recorded using an oil/water interface probe, measurements from the tops of well casings

## = NAPL observed, apparent thickness not determined

NI = Not Installed

ND = Not Detected

Wells MW-1, MW-2, MW-9, MW-10, MW-17, MW-18, MW-19, and RW-7 are associated with NYSDEC Spill 06-01852 and are under a separate investigation

Total of 100 gallons of product removed from product revovery system: RW-8 = 45 gal, RW-12 = 55 gal

Well-34 has uneven casting top

est= Estimated Value

\* = Well was dry

 ${\bf **} = {\bf Well \ equipped \ with \ automated \ product \ recovery \ system}$ 

\_= Data not recorded due to access issues

Wells were gauged on December 4, 2018

Attachment A: Apparent Thickness of LNAPL Former NuHart Plastic Manufacturing Site, NYSDEC #224136

280 Franklin Street

Brooklyn, NY

Readings taken 12/04/18 between 8:00 am and 1:00 pm (High tide @ 7:10 AM and Low tide @ 1:02 PM)

																		A	pparent Th	ickness of l	LNAPL (fe	et)														
Well Number	*Depth to Product (feet)	*Depth to Water (feet)						2015										2014									201	3							2012	
	Troduct (icct)	(RCI)	Dec-15	Nov-15	Oct-15	Sep-15	Aug-15	Jul-15	Jun-15	May-15	Apr-15	Mar-15	Jan-15	Sep-14	Aug-14	Jul-14	Jun-14	May-14	Apr-14	Mar-14	Feb-14	Jan-14	Dec-13	Nov-13	Oct-13	Sep-13	Aug-13	Jul-13	Apr-13	Mar-13	Feb-13	Jan-13	Dec-12	Nov-12	Oct-12	Sep-12
MW - 4	ND*	ND*	1.96	2.04	1.99	1.77	2.22	4.27	0.35	0.44	_	0.56	_	1.75	1.90	1.24	Trace	_	0.01	Trace	0.23	0.22	0.30	0.66	0.78	##	3.49	2.22	0.59	0.67	0.44	0.44	0.80	0.31	0.33	3.13
MW - 5	9.39	12.22	4.83	5.41	4.16	4.26	4.45	4.22	2.30	2.41	2.55	3.10	4.40	4.79	5.03	1.97	3.39	_	3.14	2.80	2.98	_	6.46	7.17	5.54	##	5.08	3.92	3.00	2.39	4.32	3.00	4.11	3.50	3.41	5.58
MW - 6	8.05	ND*	##	##	##	##	##	##	2.30	##	##	##	##	##	##	##	##	_	_	2.84	3.43	_	2.89	2.76	2.00	##	2.42	2.82	_	_	_	_	_	_	3.49	2.14
MW - 7	8.75	9.68	3.44	3.31	2.58	1.46	1.28	0.99	1.58	ND	1.94	1.79	##	2.01	2.16	0.60	0.01	_	0.17	0.17	_	_	4.78	4.70	4.00	##	2.77	1.06	1.92	4.92	5.45	1.30	1.36	2.00	1.84	1.83
MW - 8	ND	9.18	ND	_	ND	ND	ND	ND	_	ND	ND	_	_	ND																						
MW - 12	ND	6.95	ND	ND	_	_	_	_	ND	ND	ND	ND	_	ND	_	ND	ND	_	ND	ND	_	_	ND													
MW - 13	ND	7.34	ND	ND	_	_	_	_	ND	ND	ND	ND	_	ND	_	ND	ND	_	ND	ND	_	_	ND													
MW - 14	ND	8.25	ND	_	ND	ND	_	_	ND																											
MW – 15	10.47	10.73	3.08	3.07	1.97	1.05	1.05	ND	1.24	1.21	1.56	1.67	1.71	2.19	2.32	##	0.45	_	0.61	0.30	0.38	_	3.11	3.19	3.34	##	2.14	0.70	-	0.32	1.07	-	1.56	0.99	0.76	2.67
MW – 16	10.79	10.98	0.11	0.02	0.12	0.05	0.05	0.14	0.13	0.15	0.03	0.08	0.02	_	0.03	0.99	Trace	_	0.01	0.01	0.10	_	0.23	0.22	0.19	##	0.05	0.07	0.02	0.01	0.10	0.25	0.20	ND	0.24	0.20
MW - 20	10.14	13.63	3.52	3.02	3.33	3.25	3.12	2.88	2.58	2.79	3.84	4.38	5.13	1.87	1.71	2.92	2.06	_	1.47	2.90	2.58	4.19	5.07	4.90	4.11	##	3.33	1.37	3.32	1.20	1.10	1.35	1.38	3.39	3.15	3.80
MW - 21	10.90	13.71	4.46	3.85	4.51	3.63	3.32	2.97	2.53	2.77	2.98	3.46	3.23	3.62	4.64	4.90	1.99	_	2.69	2.47	2.48	3.37	3.13	3.72	4.66	##	4.37	3.66	3.38	3.43	3.75	4.10	4.23	2.89	2.04	4.15
MW – 22	11.70	12.53	1.33	1.01	0.49	1.17	1.04	0.79	0.86	0.84	0.74	1.33	1.27	1.03	1.02	0.54	0.85	_	0.74	0.86	0.75	1.22	1.07	0.69	0.50	##	1.12	0.86	0.50	0.62	1.15	1.20	0.18	0.21	0.18	1.80
MW - 23	ND	10.83	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND														
MW - 24	ND	10.07	ND	_	ND	ND	-	_	ND																											
MW - 25	9.76	13.65	3.68	3.53	3.63	3.53	3.68	3.53	2.81	3.24	3.36	1.07	1.03	3.16	4.02	3.65	3.48	_	3.91	3.75	_	_	5.66	5.56	4.01	##	4.41	3.58	3.96	3.96	4.34	3.70	2.82	7.86	4.40	3.96
MW - 26	9.79	13.63	4.23	4.08	3.77	4.00	3.70	3.65	3.18	3.33	3.64	4.14	4.11	3.84	3.70	4.50	3.02	_	2.71	3.48	3.80	4.34	4.44	4.47	4.62	##	4.18	3.69	2.86	2.33	1.00	2.45	1.62	-	2.61	4.02
MW-27	ND	10.21	ND	_	ND	ND	_	_	ND	0.99	ND	ND																								
MW-28	ND	10.93	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI														
MW – 29	ND	10.71	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI														
MW - 30	ND	9.45	ND	_	ND	ND	_	_	ND	ND	ND	ND	ND	NI																						
MW - 31	ND	8.95	ND	_	ND	_	ND	ND	_	_	ND	ND	ND	ND	ND	NI																				
MW – 32	ND	9.51	ND	_	ND	ND	_	_	ND	ND	ND	ND	ND	NI																						
MW – 34	ND	10.86	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI																						
MW – 35	ND	13.89	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI																						
MW – 36	ND	10.34	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI												
MW – 37	ND	10.77	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI												
MW – 38	ND	8.93	ND		ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI									
MW – 39	ND	8.04	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI											
MW – 40	ND	6.25	ND	_	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI									
MW – 41		_	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI										
MW – 42	ND	8.70	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI										
RW - 1	ND	8.42	ND	_	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND																		
RW - 2	12.74	14.37	4.28	_	2.64	2.97	3.41	5.54	5.28	5.44	2.82	4.19	4.52	4.52	4.53	4.52	0.11	_	1.30	3.05	2.31	2.80	3.19	5.09	3.86	##	4.07	2.96	2.92	3.48	3.75	4.20	2.52	1.92	1.50	5.85
RW – 3	14.65	17.28	4.27	2.92	4.14	1.39	2.14	4.31	2.23	2.23	1.81	3.28	3.41	3.50	3.45	3.56	4.12		1.58	2.90	2.28	4.60 (est)	3.60	3.33	1.68	##	2.96	1.44	3.90	3.20	3.34	3.70	3.58	2.84	3.50	3.88
RW – 4	11.71	15.08	2.82	2.31	1.99	1.09	2.02	3.65	3.66	3.53	3.53	1.43	1.35	2.78	2.88	##	2.86		1.81	3.25	3.27	2.45	2.67	2.30	1.46	##	2.75	1.08	3.06	3.15	3.00	3.05	2.95	_	3.45	3.35
RW - 5	11.05	ND*	1.96	5.64	4.18	2.03	5.79	4.87	4.69	4.75	0.70	0.85	0.91	0.85	0.43	0.17	0.17	_	0.12	0.93	0.43	0.52	0.60	0.79	0.54	##	0.69	0.51	2.62	_	_	_	2.35	3.00	1.88	-
RW – 6	11.56	12.29	0.77	0.65	0.66	0.65	0.61	0.78	1.96	2.35	0.71	1.19	1.14	0.71	0.64	0.78	0.79		0.45	1.28	0.96	0.41	0.94	1.30	0.67	##	0.10	0.08	0.45	0.50	0.21	0.40	0.15	0.90	0.22	0.06
RW - 8 **	_	_	_	_	_	_	_	_	_	_	2.14	2.93	2.92	4.01	4.48	##	2.95	_	0.65	1.47	0.86	2.37	2.46	3.92	4.13	##	4.59	3.64	_	_	_	_	_	_		
RW – 9	12.90	16.35	4.62	4.37	3.52	2.68	3.23	3.04	4.82	4.79	4.28	5.68	5.65	4.81	4.59	4.92	4.14	_	1.02	2.90	2.71	4.34	5.25	4.88	3.08	##	4.09	2.37	4.40	2.62	3.11	3.50	3.08	3.83	2.98	5.33
RW - 10	12.66	16.72	4.46	5.32	4.45	4.12	4.12	5.71	3.80	3.95	3.65	4.96	5.04	3.93	3.74	3.57	3.18	_	3.38	3.89	3.48	3.80	3.81	3.99	4.11	##	4.11	3.55	_	_	_	_	_	_	_	
RW – 11	13.09	16.11	4.65	4.39	3.59	3.24	3.62	3.43	3.66	3.67	3.00	3.87	3.97	4.43	4.42	4.46	3.87		2.03	2.54	2.59	3.66	4.27	5.48	2.65	##	3.91	3.49	3.15	2.67	3.11	3.50	2.93	4.49	2.58	4.40
RW-12 **	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_		_

Data Recorded using an oil/water interface probe, measurements from the tops of well casings

## = NAPL observed, apparent thickness not determined

NI = Not Installed

ND = Not Detected

Wells MW-1, MW-2, MW-9, MW-10, MW-17, MW-18, MW-19, and RW-7 are associated with NYSDEC Spill 06-01852 and are under a separate investigation

Total of 100 gallons of product removed from product revovery system: RW-8 = 45 gal, RW-12 = 55 gal

Well-34 has uneven casting top

est= Estimated Value

\* = Well was dry

\*\* = Well equipped with automated product recovery system

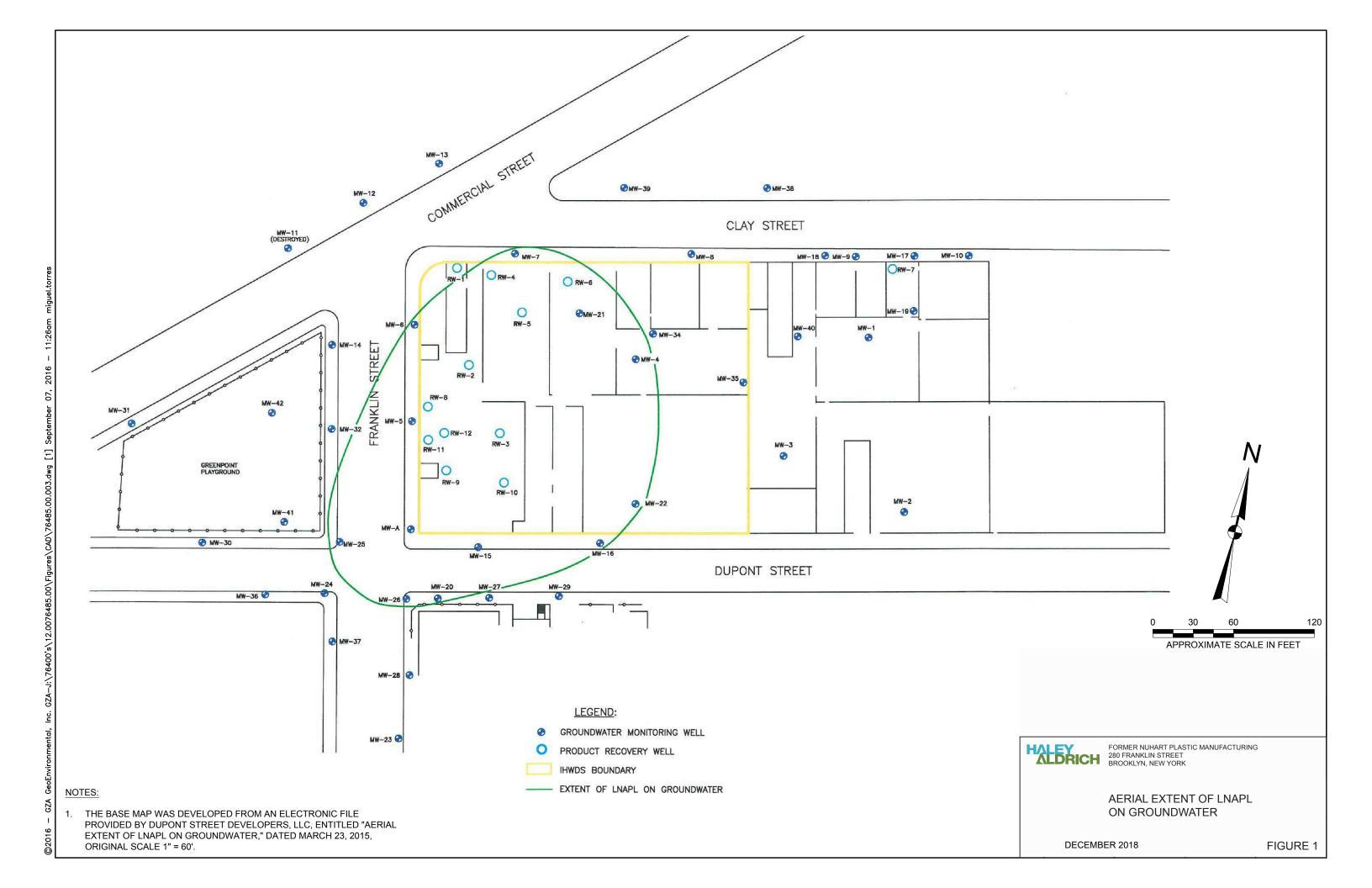
\_= Data not recorded due to access issues

Wells were gauged on December 4, 2018

Attachment B

**Site Figure** 





# REPORT ON NUHART PLASTICS SITE 49 DUPONT STREET BROOKLYN, NEW YORK

by Haley & Aldrich of New York New York, New York

for Dupont Street Developers, LLC Elmhurst, New York

File No. 133110 January 2019





92 January 2019 File No. 133110-002

Via Email: yukyin.wong@dec.ny.gov
New York Start Department of Environmental Conservation
Division of Environmental Remediation, Region 2
47-40 21st Street
Long Island City, New York 11101

Attention: Mr. Bryan Wong

Subject: Project Status Report

Former NuHart Plastics Manufacturing Site # 224136

280 Franklin Street Brooklyn, New York

Dear Mr. Wong:

Haley & Aldrich of New York is pleased to present this Project Status Report on behalf of Dupont Street Developers, LLC for the above referenced Site. Copies of this Project Status Report have also been provided to Dawn Hettrick of the New York State Department of Health. The Project Status Report is for November 2018 to December 2018. If you have any questions, please contact us at 646-518-7735.

Sincerely yours,
HALEY & ALDRICH OF NEW YORK

James Bellew Senior Associate

CC:

Dawn Hettrick (NYSDOH)
Dupont Street Developers, LLC
Jane O'Connell (NYSDEC)
Wendy A. Marsh

www.haleyaldrich.com

Email: dawn.hettrick@health.ny.gov

Email: wmarsh@hancocklaw.com

Email: bojinzhu@gmail.com Email: jane.oconnell@dec.ny.gov Dupont Street Developers, LLC 9 January 2019 Page 2

This status report summarizes activities conducted at the Former NuHart Plastic Manufacturing Site (Site) from November 2018 through December 2018. Activities during this period were conducted by Haley and Aldrich of New York (HANY). A Site Plan showing the general Site layout, nearby area, and associated wells is included as Figure 1.

Interim remedial measure (IRM) activities for monitoring and removal of light non-aqueous-phase liquid (LNAPL) at the Site were performed during the monitoring period in general conformance with the New York State Department of Environmental Conservation (NYSDEC)-approved Operation, Maintenance and Monitoring Plan (OM&M Plan) for the product recovery system.

# **Interim Remedial Measure Activities**

The IRM routine activities (Monthly) were performed by HANY on 7 January 2019. The apparent LNAPL thickness measurement table is provided as Attachment A. Additionally, a Well Location Map showing the extent of LNAPL based on the monitoring date is shown as **Figure 1**.

# **Maintenance Activities**

General maintenance activities include collection of spent IRM-related absorbent materials in the vicinity of recovery wells, placing new absorbent materials, general housekeeping activities and proper labeling of waste containers generated during this IRM event. Both skimming systems associated with recovery wells RW-8 and RW-12 were found to be powered and operational during the Site visit.

# Monitoring and LNAPL Removal

Gauging of onsite and offsite monitoring and recovery wells associated with the Site was performed and the wells that could not be accessed and/or gauged are identified on **Attachment A**. No changes were observed in the lateral extent of the LNAPL plume. On 7 January 2019, high tide was observed from 10:18 AM to 4:24 PM partially during the well gauging period (by NOAA/NOS/CO-OPS Station ID (8517673) Hunters Point, Newtown Creek, NY). The depths to the water table were variable relative to the depths noted in the previous status reports, with some wells showing increases and some wells showing decreases. LNAPL apparent thicknesses were also variable, with increases generally noted in wells where the depth to water increased and decreases noted in wells where the depth to water decreased.

As per request from Bryan Wong of NYSDEC, received by email on 4 January 2019, Haley & Aldrich included MW-1, MW-9, MW-10, MW-17, MW-18 and RW-7 as part of this month's monitoring activities. Of the additional six wells, three were accessible for monitoring (MW-10, MW-17 and MW-18) in which no LNAPL was identified. MW-9, located on the southern side of Clay Street, was paved over with new sidewalk. MW-1 and RW-7, located inside the facility on the northeast corner, were inaccessible due to debris and equipment located in the vicinity of the monitoring wells.

The product recovery holding reservoirs were emptied during this event. The amount of LNAPL removed from the wells was estimated at 70 gallons, including LNAPL from the drums associated with the skimmers on recovery wells RW-8 and RW-12. Based on previous LNAPL estimates, an estimated 2,750 gallons of product have been removed from the subsurface since early 2015, with most of the LNAPL disposed. The removed LNAPL is stored in intermediate bulk container (IBC) tanks located in the



Dupont Street Developers, LLC 9 January 2019 Page 3

Site building, pending pickup and offsite disposal. When the IBC tanks are nearly full and/or the containerized spent absorbent materials require disposal, the designated waste management company will be contacted and waste disposal requested.

Eastern Environmental Solutions, Inc. (Eastern) is presently contracted to conduct waste management activities for disposal of product from the IBC tanks at the Site. To date, Eastern has transported and disposed an estimated 2,116 gallons of product at the CycleChem facility in Elizabeth, NJ as hazardous waste. No waste was transported from the Site during this period and transportation and disposal information will continue to be included in the progress reports following the months during which disposal activities occur.

# Feasibility Study and Proposed Remedial Action Work Plan (PRAP)

The Feasibility study prepared by GZA was submitted to the NYSDEC in January 2017. The NYSDEC issued the proposed remedial action work plan (PRAP) in September 2018. A public comment hearing was held on 4 October 2018 to discuss the proposed remedy for the Site. The public comment period ended on 9 November 2018.

# **Site Soil Management Report**

There were no requests for evaluation of potential work in the LNAPL plume area during this period.

# Attachments

Attachment A – Apparent Thickness of LNAPL Attachment B – Well Location Map showing areal extent of LNAPL on groundwater



# Attachment A Apparent Thickness of LNAPL



Attachment A: Apparent Thickness of LNAPL Former NuHart Plastic Manufacturing Site, NYSDEC #224136 280 Franklin Street

Brooklyn, NY

Readings taken 1/7/19 between 7:00 am and 12:00 pm (High tide @ 10:18 AM and Low tide @ 4:24 PM)

	*D4. 4-	*Donath to Worker														Apparent Th	ickness of LNA	PL (feet)														
Well Number	*Depth to Product (feet)	*Depth to Water (feet)	2019				20	18									2017										2016					
	Trouber (Reet)	(rect)	Jan-19	Dec-18	Oct-18	Jun-18	May-18	Apr-18	Mar-18	Feb-18	Jan-18	Nov-17	Oct-17	Sep-17	Aug-17	Jul-17	Jun-17	May-17	Apr-17	Mar-17	Feb-17	Jan-17	Dec-16	Nov-16	Oct-16	Sep-16	Aug-16	Jul-16	Jun-16	May-16	Apr-16	Mar-16
MW-4	ND*	ND*	ND*	ND*	ND*	0.12	1.13	0.65	0.73	ND*	0.92	2.12	0.81	1.76	1.73	1.23	1.77	ND*	1.32	1.61	1.13	1.31	1.30	1.00	1.18	1.35	1.71	1.73	1.80	1.53	1.73	1.43
MW - 5	9.54	12.16	2.62	2.83	4.12	1.66	1.83	2.77	2.19	2.21	4.65	5.83	2.19	4.44	4.4	3.71	3.54	2.81	2.80	3.13	4.05	3.00	3.55	4.43	3.64	3.22	4.31	4.03	4.29	3.07	3.18	3.14
MW - 6	8.72	ND	##	##	ND	0.55	0.50	2.47	0.74	##	##	##	1.22	3.19	3.15	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##
MW - 7	8.56	9.70	1.14	0.93	0.54	1.89	1.99	1.80	2.03	2.55	3.32	4.91	1.48	1.45	1.41	0.9	0.00	1.50	1.92	2.53	3.71	1.28	0.78	1.73	0.91	0.04	1.89	1.58	2.22	2.11	1.90	1.66
MW – 8	ND	9.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 12	ND	7.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	_													
MW – 13	ND	7.42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW – 14	ND	8.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW – 15	10.19	11.03	0.84	0.26	0.12	0.04	0.04	0.07	0.07	0.08	3.16	1.78	0.31	0.29	0.26	0.26	0.24	0.12	0.22	0.28	0.40	0.31	0.20	0.80	0.20	0.17	0.81	0.07	0.48	0.22	0.71	0.03
MW – 16	10.81	10.98	0.17	0.19	0.20	0.06	0.10	0.13	_	0.1	0.34	0.25	0.35	0.37	0.35	0.08	0.28	0.03	0.10	0.23	0.20	0.31	ND	ND	ND	ND	ND	0.01	0.25	0.02	0.01	0.02
MW - 20	10.11	12.88	2.77	3.49	2.51	1.4	1.55	2.52	1.77	1.02	3.15	3.99	2.52	2.58	2.63	2.9	2.83	2.61	2.94	2.33	3.02	3.02	2.88	3.28	2.90	3.16	2.89	2.88	2.85	2.22	2.49	2.43
MW - 21	11.00	12.48	1.48	2.81	1.73	1.43	1.42	1.62	1.38	2.29	3.83	4.79	3.26	3.35	2.13	1.45	2.75	3.31	3.30	3.04	3.62	7.59	3.27	3.32	1.25	2.39	3.61	2.96	2.95	2.63	4.18	2.68
MW - 22	11.08	12.76	1.68	0.83	0.69	0.97	0.89	0.76	1.11	0.28	0.37	1.77	1.25	1.24	1.21	0.75	0.66	0.66	0.78	0.64	0.65	0.50	0.51	0.38	0.30	0.01	0.51	0.87	0.62	0.45	0.48	0.44
MW - 23	ND	10.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 24	ND	10.10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 25	9.83	13.69	3.86	3.89	3.44	2.85	2.89	4.03	3.45	3.44	3.66	4.54	4.03	4.05	4.02	3.73	4.09	3.85	3.70	3.74	3.47	3.89	3.62	3.60	4.20	3.79	3.65	4.01	3.75	3.55	3.33	3.42
MW - 26	9.90	13.04	3.14	3.84	3.45	0.75	2.35	3.14	2.48	3.19	3.95	5.59	3.81	3.82	3.79	3.65	3.42	3.29	3.73	3.64	3.24	3.14	3.20	3.56	4.00	3.28	4.26	3.58	3.82	3.41	3.37	2.97
MW - 27	ND	10.24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 28	ND	10.62	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 29	ND	10.72	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 30	ND	9.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 31	ND	8.99	ND	ND	ND	ND	ND	ND	ND	_	_	_	_	_	ND	ND	ND	ND	ND													
MW - 32	ND	9.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 34	ND	10.87	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 35	ND	13.81	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 36	ND	10.38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 37	ND	10.83	ND	ND	ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND										
MW - 38	ND	8.94	ND	ND	ND	ND	ND	ND	ND	_	_	_	_	_	ND	ND	ND	ND	ND													
MW - 39	ND	8.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 40	ND	6.30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
MW - 41	_	_	_	_	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND										
MW - 42	ND	8.74	ND	ND*	ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND										
RW - 1	ND	8.49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
RW – 2	7.41	12.53	5.12	1.63	5.54	0.06	0.08	1.65	0.08	5.52	4.01	5.19	0.56	0.58	0.53	6.09	6.25	0.42	1.13	2.90	3.09	3.53	1.65	1.18	1.26	1.35	1.88	2.05	2.41	3.02	2.12	3.34
RW - 3	14.63	16.85	2.22	2.63	3.77	2.08	2.03	2.52	2.12	3.03	ND	3.31	3.17	3.15	3.22	2.28	3.44	2.85	2.71	3.46	2.98	3.10	1.91	3.95	2.40	2.50	3.08	1.97	2.49	1.64	2.17	2.09
RW – 4	11.75	ND	##	03.37	2.85	2.96	2.97	3.80	3.01	02.39	3.06	4.32	4.33	4.17	4.18	3.1	4.1	03.69	3.65	3.69	3.67	3.05	3.80	2.80	2.77	3.30	2.73	2.65	2.32	2.02	2.22	2.93
RW - 5	10.94	ND	##	##	ND*	0.44	0.33	0.65	0.34	4.64	0.49	4.49	5.28	5.27	5.26	5.42	3.75	5.00	5.44	5.10	0.70	2.95	1.55	3.05	0.42	0.36	0.50	4.97	2.76	2.47	2.66	3.21
RW - 6	11.51	12.42	0.91	00.73	1.91	0.83	0.88	0.96	0.91	00.90	2.61	1.64	0.73	0.6	1.61	0.93	5.35	1.05	1.27	1.22	0.90	0.90	0.85	0.68	0.87	0.92	1.46	1.29	0.81	0.67	0.73	0.74
RW - 8 **	_	_	_	_	_	0.02	0.02	0.03	0.03	0.96	1.99	_	1.15	2.2	3.62	1.2	2.34	0.02	0.01	_	_	_	_	_	_	_	_	_	_	_	_	_
RW – 9	13.07	14.60	1.53	3.45	4.52	0.11	2.38	2.28	1.51	2.88	4.32	5.58	3.72	3.77	3.69	2.84	3.25	2.70	2.69	3.50	3.66	2.47	3.09	3.57	2.45	2.35	3.19	2.15	3.18	2.75	3.09	3.81
RW - 10	12.71	16.51	3.80	4.06	2,46	1.52	1.60	3,70	0,66	3,48	4.64	4.28	3.65	3.67	3.71	3.67	3.78	4.07	3.79	4.27	4.70	4.15	3.86	3.45	3.80	3,36	4.44	3.91	3,69	3.74	3.66	3.67
RW - 11	13.04	15.73	2.69	3.02	2.21	2.51	2.52	4.34	2.41	2.50	5.01	5.5	2.97	4.57	3.93	2.33	3.00	2.92	3.00	3.55	3.73	2.65	1.90	2.04	2.43	2.12	3.66	2.98	3.43	3.08	2.94	3.05
RW-12 **	_	_	_	_	_	0.11	0.02	2.61	0.02	1.12	1.5	5.96	3.65	5.4	2.68	0.01	0.03	0.01	0.02	0.80	3.89	_	_	_	_	_	_		_	_	_	
MW - 1	_	_	_	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG												
MW - 9	_			NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG												
MW - 10	ND	8.11	ND	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG												
MW - 17	ND	7.45	ND	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG												
MW - 18	ND	7.53	ND	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG												
RW - 7	_	7.55	_	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG												
IX W - /	_		_	NG	NG	NU	NU	NU	NG	NG	NU	NG	DN	INU	NU	INU	INU	NU	NU	NG	NU	INU	DN	DN	INU	MG	NG	DIL	NU	INU	ING	NU

# Notes:

Data Recorded using an oil/water interface probe, measurements from the tops of well casings

## = NAPL observed, apparent thickness not determined

NI = Not Installed ND = Not Detected NG = Not Gauged
Wells MW-1, MW-2, MW-9, MW-10, MW-17, MW-18, MW-19, and RW-7 are associated with NYSDEC Spill 06-01852

As per request of NYSDEC, wells MW-1, MW-9, MW-10, MW-17, MW-18 and RW-7 were included in this event

Total of 100 gallons of product removed from product revovery system: RW-8 = 45 gal, RW-12 = 55 gal

Well-34 has uneven casting top

est= Estimated Value

\_= Data not recorded due to access issues

Wells were gauged on January 7, 2019

Attachment A: Apparent Thickness of LNAPL Former NuHart Plastic Manufacturing Site, NYSDEC #224136 280 Franklin Street

Brooklyn, NY

Readings taken 1/7/19 between 7:00 am and 12:00 pm (High tide @ 10:18 AM and Low tide @ 4:24 PM)

Part		4D 414	4D 4 W																		Apparent 7	Thickness of	f LNAPL (fee	t)															
Part	Well Number	*Depth to Product (feet)	*Depth to Water	20	16						2015										2014									201	13							2012	
West   State	Troduct (rect)	(icct)	Feb-16	Jan-16	Dec-15	Nov-15	Oct-15	Sep-15	Aug-15	Jul-15	Jun-15	May-15	Apr-15	Mar-15	Jan-15	Sep-14	Aug-14	Jul-14	Jun-14	May-14	Apr-14	Mar-14	Feb-14	Jan-14	Dec-13	Nov-13	Oct-13	Sep-13	Aug-13	Jul-13	Apr-13	Mar-13	Feb-13	Jan-13	Dec-12	Nov-12	Oct-12	Sep-12	
March   1.5   1.	MW - 4	ND*	ND*	1.85	1.77	1.96	2.04	1.99	1.77	2.22	4.27	0.35	0.44	-	0.56	_	1.75	1.90	1.24	Trace	_	0.01	Trace	0.23	0.22	0.30	0.66	0.78	##	3.49	2.22	0.59	0.67	0.44	0.44	0.80	0.31	0.33	3.13
No.   1	MW - 5	9.54	12.16	1.85	3.24	4.83	5.41	4.16	4.26	4.45	4.22	2.30	2.41	2.55	3.10	4.40	4.79	5.03	1.97	3.39	_	3.14	2.80	2.98	_	6.46	7.17	5.54	##	5.08	3.92	3.00	2.39	4.32	3.00	4.11	3.50	3.41	5.58
Mary   Mary	MW - 6	8.72	ND	##	##	##	##	##	##	##	##	2.30	##	##	##	##	##	##	##	##	_	_	2.84	3.43	_	2.89	2.76	2.00	##	2.42	2.82	_	_	_	_	_	_	3.49	2.14
West   West	MW - 7	8.56	9.70	2.31	2.47	3.44	3.31	2.58	1.46	1.28	0.99	1.58	ND	1.94	1.79	##	2.01	2.16	0.60	0.01	_	0.17	0.17	_	_	4.78	4.70	4.00	##	2.77	1.06	1.92	4.92	5.45	1.30	1.36	2.00	1.84	1.83
March   19	MW - 8	ND	9.11	ND		ND	ND	ND	ND	_	ND	ND	_	_	ND																								
March   10	MW - 12	ND	7.08	_	_	ND	ND	_		_	_	ND	ND	ND	ND		ND	_	ND	ND	_	ND	ND	_	_	ND													
March   1.11	MW - 13	ND	7.42	_	_	ND	ND	_		_	_	ND	ND	ND	ND		ND	_	ND	ND	_	ND	ND	_	_	ND													
No.   St.    MW - 14	ND	8.28	ND	_	ND	ND	_	_	ND																														
West   West	MW – 15	10.19	11.03	0.04	0.60	3.08	3.07	1.97	1.05	1.05	ND	1.24	1.21	1.56	1.67	1.71	2.19	2.32	##	0.45	_	0.61	0.30	0.38	_	3.11	3.19	3.34	##	2.14	0.70	-	0.32	1.07	-	1.56	0.99	0.76	2.67
May   1.10   1.14   1.15   1	MW - 16	10.81	10.98	0.16	0.02	0.11	0.02	0.12	0.05	0.05	0.14	0.13	0.15	0.03	0.08	0.02	_	0.03	0.99	Trace	_	0.01	0.01	0.10	_	0.23	0.22	0.19	##	0.05	0.07	0.02	0.01	0.10	0.25	0.20	ND	0.24	0.20
May   11	MW - 20	10.11	12.88	1.99	2.46	3.52	3.02	3.33	3.25	3.12	2.88	2.58	2.79	3.84	4.38	5.13	1.87	1.71	2.92	2.06	_	1.47	2.90	2.58	4.19	5.07	4.90	4.11	##	3.33	1.37	3.32	1.20	1.10	1.35	1.38	3.39	3.15	3.80
May   1.5	MW - 21	11.00	12.48	2.42	2.97	4.46	3.85	4.51	3.63	3.32	2.97	2.53	2.77	2.98	3.46	3.23	3.62	4.64	4.90	1.99	_	2.69	2.47	2.48	3.37	3.13	3.72	4.66	##	4.37	3.66	3.38	3.43	3.75	4.10	4.23	2.89	2.04	4.15
Mary   Mary	MW - 22	11.08	12.76	0.15	0.22	1.33	1.01	0.49	1.17	1.04	0.79	0.86	0.84	0.74	1.33	1.27	1.03	1.02	0.54	0.85	_	0.74	0.86	0.75	1.22	1.07	0.69	0.50	##	1.12	0.86	0.50	0.62	1.15	1.20	0.18	0.21	0.18	1.80
Mary   1.10	MW - 23	ND	10.82	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND																
May - 12   May - 13   May - 14   May - 15    MW - 24	ND	10.10	ND	_	ND	ND	_	_	ND																														
SW-22         NO         1612         NO         NO <t< td=""><td>MW - 25</td><td>9.83</td><td>13.69</td><td>3.32</td><td>3.43</td><td>3.68</td><td>3.53</td><td>3.63</td><td>3.53</td><td>3.68</td><td>3.53</td><td>2.81</td><td>3.24</td><td>3.36</td><td>1.07</td><td>1.03</td><td>3.16</td><td>4.02</td><td>3.65</td><td>3.48</td><td>_</td><td>3.91</td><td>3.75</td><td>_</td><td>_</td><td>5.66</td><td>5.56</td><td>4.01</td><td>##</td><td>4.41</td><td>3.58</td><td>3.96</td><td>3.96</td><td>4.34</td><td>3.70</td><td>2.82</td><td>7.86</td><td>4.40</td><td>3.96</td></t<>	MW - 25	9.83	13.69	3.32	3.43	3.68	3.53	3.63	3.53	3.68	3.53	2.81	3.24	3.36	1.07	1.03	3.16	4.02	3.65	3.48	_	3.91	3.75	_	_	5.66	5.56	4.01	##	4.41	3.58	3.96	3.96	4.34	3.70	2.82	7.86	4.40	3.96
Metale   March   Mar	MW - 26	9.90	13.04	3.82	3.41	4.23	4.08	3.77	4.00	3.70	3.65	3.18	3.33	3.64	4.14	4.11	3.84	3.70	4.50	3.02	_	2.71	3.48	3.80	4.34	4.44	4.47	4.62	##	4.18	3.69	2.86	2.33	1.00	2.45	1.62	-	2.61	4.02
May   May	MW - 27	ND	10.24	ND	_	ND	ND	_	_	ND	0.99	ND	ND																										
Miles   Mile	MW - 28	ND	10.62	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI																
Miles	MW - 29	ND	10.72	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI																
Moy - 12	MW - 30	ND	9.50	ND	_	ND	ND	_	_	ND	ND	ND	ND	ND	NI																								
Miles	MW - 31	ND	8.99	ND	ND	ND	_	ND	_	ND	ND	_	_	ND	ND	ND	ND	ND	NI																				
MW-38   ND	MW - 32	ND	9.54	ND	_	ND	ND	_	_	ND	ND	ND	ND	ND	NI																								
MW-16   NO	MW - 34	ND	10.87	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI																								
MR-97	MW - 35	ND	13.81	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI																								
NN - 98	MW - 36	ND	10.38	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI														
MN - 9	MW - 37	ND	10.83	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI														
MW - 40   ND   6.30   ND   ND   ND   ND   ND   ND   ND   N	MW - 38	ND	8.94	ND	_	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI											
MW-41	MW - 39	ND	8.02	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI													
MW-42   ND	MW - 40	ND	6.30	ND	ND	ND	_	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI									
RW-1 ND R.0 ND ND ND ND ND ND ND ND ND ND ND ND ND	MW - 41	_	_	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI												
RW-2 7.41 12.53 2.70 2.83 4.28 - 264 2.97 3.41 5.54 5.28 5.44 2.82 4.19 4.52 4.52 4.53 4.52 0.11 - 1.30 3.05 2.31 2.80 3.19 5.09 3.86 ## 4.07 2.96 2.92 3.48 3.75 4.20 2.52 1.92 1.50 RW-3 14.63 16.85 16.44 2.37 4.27 2.92 4.14 1.39 2.14 4.31 2.23 2.23 1.81 3.28 3.41 3.50 3.45 3.56 4.12 - 1.58 2.90 2.23 4.00 3.30 1.46 ## 2.06 1.40 3.00 3.30 3.04 3.00 3.05 3.34 3.50 1.80 ## 2.06 1.40 3.00 3.30 3.44 3.00 3.05 3.58 1.40 1.00 1.00 1.00 1.00 1.00 1.00 1.00	MW - 42	ND	8.74	ND	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI												
RW-3	RW - 1	ND	8.49	ND	ND	ND	_	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND																		
RW-4 11.75 ND 2.03 2.51 2.82 2.31 1.99 1.09 2.02 3.65 3.66 3.53 3.53 1.43 1.35 2.78 2.88 ## 2.86 - 1.81 3.25 3.27 2.45 2.67 2.30 1.46 ## 2.75 1.08 3.06 3.15 3.00 3.05 2.95 - 3.45 RW-5 10.94 ND 2.53 1.92 1.96 5.64 4.18 2.03 5.79 4.87 4.69 4.75 0.70 0.85 0.91 0.85 0.91 0.85 0.91 0.85 0.91 0.85 0.93 0.43 0.17 0.17 - 0.12 0.93 0.43 0.52 0.00 0.79 0.54 ## 0.10 0.05 0.51 2.62 2.35 3.00 1.88 RW-6 11.51 12.42 0.76 0.74 0.77 0.65 0.66 0.65 0.61 0.78 1.96 2.35 0.71 1.19 1.14 0.71 0.64 0.78 0.79 - 0.45 1.28 0.96 0.41 0.94 1.30 0.67 ## 0.10 0.80 0.51 2.62 2.35 3.00 1.88 RW-8**	RW - 2	7.41	12.53	2.70	2.83	4.28	_	2.64	2.97	3.41	5.54	5.28	5.44	2.82	4.19	4.52	4.52	4.53	4.52	0.11		1.30	3.05	2.31	2.80	3.19	5.09	3.86	##	4.07	2.96	2.92	3.48	3.75	4.20	2.52	1.92	1.50	5.85
RW-5 10.94 ND 2.53 1.92 1.96 5.64 4.18 2.03 5.79 4.87 4.69 4.75 0.70 0.85 0.91 0.85 0.43 0.17 0.17 - 0.12 0.93 0.43 0.52 0.60 0.79 0.54 ## 0.69 0.51 2.62 2.35 3.00 1.88 RW-6 11.51 12.42 0.76 0.74 0.77 0.65 0.66 0.65 0.61 0.78 1.96 2.35 0.71 1.19 1.14 0.71 0.64 0.78 0.79 - 0.45 1.28 0.96 0.41 0.94 1.30 0.67 ## 0.10 0.60 0.45 0.50 0.45 0.50 0.45 0.50 0.21 0.40 0.15 0.90 0.22 RW-8**	RW - 3	14.63	16.85	1.64	2.37	4.27	2.92	4.14	1.39	2.14	4.31	2.23	2.23	1.81	3.28	3.41	3.50	3.45	3.56	4.12		1.58	2.90	2.28	4.60 (est)	3.60	3.33	1.68	##	2.96	1.44	3.90	3.20	3.34	3.70	3.58	2.84	3.50	3.88
RW-6 11.51 12.42 0.76 0.74 0.77 0.65 0.66 0.65 0.61 0.78 1.96 2.35 0.71 1.19 1.14 0.71 0.64 0.78 0.79 - 0.45 1.28 0.96 0.41 0.94 1.30 0.67 ## 0.10 0.08 0.45 0.50 0.21 0.40 0.15 0.90 0.22 RW-8**	RW-4	11.75	ND	2.03	2.51	2.82	2.31	1.99	1.09	2.02	3.65	3.66	3.53	3.53	1.43	1.35	2.78	2.88	##	2.86		1.81	3.25	3.27	2.45	2.67	2.30	1.46	##	2.75	1.08	3.06	3.15	3.00	3.05	2.95	_	3.45	3.35
RW-8 **	RW - 5	10.94	ND	2.53	1.92	1.96	5.64	4.18	2.03	5.79	4.87	4.69	4.75	0.70	0.85	0.91	0.85	0.43	0.17	0.17		0.12	0.93	0.43	0.52	0.60	0.79	0.54	##	0.69	0.51	2.62	_	_	_	2.35	3.00	1.88	-
RW-9 13.07 14.60 2.42 3.46 4.62 4.37 3.52 2.68 3.23 3.04 4.82 4.79 4.28 5.68 5.65 4.81 4.59 4.92 4.14 - 1.02 2.90 2.71 4.34 5.25 4.88 3.08 ## 4.09 2.37 4.40 2.62 3.11 3.50 3.08 3.83 2.98 RW-10 12.71 16.51 4.69 4.77 4.46 5.32 4.45 4.12 4.12 5.71 3.80 3.95 3.65 4.96 5.04 3.93 3.74 3.57 3.18 - 3.38 3.89 3.48 3.80 3.81 3.99 4.11 ## 4.11 3.55	RW - 6	11.51	12.42	0.76	0.74	0.77	0.65	0.66	0.65	0.61	0.78	1.96	2.35	0.71	1.19	1.14	0.71	0.64	0.78	0.79		0.45	1.28	0.96	0.41	0.94	1.30	0.67	##	0.10	0.08	0.45	0.50	0.21	0.40	0.15	0.90	0.22	0.06
RW-10 12.71 16.51 4.69 4.77 4.46 5.32 4.45 4.12 4.12 5.71 3.80 3.95 3.65 4.96 5.04 3.93 3.74 3.57 3.18 - 3.38 3.89 3.48 3.80 3.81 3.99 4.11 ## 4.11 3.55	RW - 8 **		_	_			_			_	_	_		2.14	2.93	2.92	4.01	4.48	##	2.95	_	0.65	1.47	0.86	2.37	2.46	3.92	4.13	##	4.59	3.64	_	_			_	_		_
RW-11 13.04 15.73 2.45 3.07 4.65 4.39 3.59 3.24 3.62 3.43 3.66 3.67 3.00 3.87 3.97 4.43 4.42 4.46 3.87 - 2.03 2.54 2.59 3.66 4.27 5.48 2.65 ## 3.91 3.49 3.15 2.67 3.11 3.50 2.93 4.49 2.58 RW-12**	RW – 9	13.07	14.60	2.42	3.46	4.62	4.37	3.52	2.68	3.23	3.04	4.82	4.79	4.28	5.68	5.65	4.81	4.59	4.92	4.14		1.02	2.90	2.71	4.34	5.25	4.88	3.08	##	4.09	2.37	4.40	2.62	3.11	3.50	3.08	3.83	2.98	5.33
RW-12**	RW - 10	12.71	16.51	4.69	4.77	4.46	5.32	4.45	4.12	4.12	5.71	3.80	3.95	3.65	4.96	5.04	3.93	3.74	3.57	3.18	_	3.38	3.89	3.48	3.80	3.81	3.99	4.11	##	4.11	3.55	_	_	_			_	_	_
MW-1         -         NG	RW - 11	13.04	15.73	2.45	3.07	4.65	4.39	3.59	3.24	3.62	3.43	3.66	3.67	3.00	3.87	3.97	4.43	4.42	4.46	3.87	_	2.03	2.54	2.59	3.66	4.27	5.48	2.65	##	3.91	3.49	3.15	2.67	3.11	3.50	2.93	4.49	2.58	4.40
MW-9 — — NG NG NG NG NG NG NG NG NG NG NG NG NG	RW-12 **	_	-	_		_	_	_		_	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	
MW-10 ND 8.11 NG NG NG NG NG NG NG NG NG NG NG NG NG	MW - 1	_	_	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG																	
MW-17 ND 7.45 NG NG NG NG NG NG NG NG NG NG NG NG NG	MW - 9	_	_	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG																	
	MW - 10	ND	8.11	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG																	
MW-18 ND 753 NG NG NG NG NG NG NG NG NG NG NG NG NG	MW - 17	ND	7.45	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG																	
ו שוו שוו שוו שוו שוו שוו שוו שוו שוו ש	MW - 18	ND	7.53	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG																	
RW-7 NG NG NG NG NG NG NG NG NG NG NG NG NG	RW - 7	_	_	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG																	

Notes

Data Recorded using an oil/water interface probe, measurements from the tops of well casings

## = NAPL observed, apparent thickness not determined

NI = Not Installed ND = Not Detected NG = Not Gauged

Wells MW-1, MW-2, MW-9, MW-10, MW-17, MW-18, MW-19, and RW-7 are associated with NYSDEC Spill 06-01852

As per request of NYSDEC, wells MW-1, MW-9, MW-10, MW-17, MW-18 and RW-7 were included in this event Total of 100 gallons of product removed from product revovery system: RW-8 = 45 gal, RW-12 = 55 gal

Well-34 has uneven casting top

est= Estimated Value

\_= Data not recorded due to access issues

Wells were gauged on January 7, 2019

Attachment B

**Site Figure** 



