



***Environmental, Planning, and Engineering Consultants***

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November 16, 2021

Mr. Matthew Hubicki  
Project Manager  
NYSDEC  
Division of Environmental Remediation  
625 Broadway  
Albany, New York 12233-7016

Re: Progress Report – October 2021  
Polychrome East Site  
City of Yonkers, Westchester County  
NYSDEC BCP Site No. C360098

Dear Mr. Hubicki:

This Progress Report has been prepared by AKRF, Inc. (AKRF) on behalf of Avalon Yonkers Sun Sites, LLC (AVB) to summarize the work performed at the Polychrome East site [Brownfield Cleanup Program (BCP) Site No. C360098] located at 80-94 Alexander Street, Yonkers, New York (the Site) during the month of October 2021.

**Community Air Monitoring Plan (CAMP) observations were as follows:**

- No intrusive soil work occurred below the final cover system at the Site during the October 2021 reporting period.
- On October 7, 8, 20, and 21, 2021, handheld equipment was used to monitor volatile organic compounds (VOCs), oxygen, and hydrogen sulfide (H<sub>2</sub>S) during dense non-aqueous phase liquid (DNAPL) coal tar gauging and removal activities, in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP). Air monitoring was performed within the work zone. No VOC or H<sub>2</sub>S exceedances were recorded during the DNAPL removal activities.

**Site Activities:**

- During the month of October 2021, no on-Site excavation activities below the final cover system occurred.
- On October 7 and 20, 2021, DNAPL gauging was conducted at NW-1, NW-2, NW-3, NW-4, and NW-5. Gauging of groundwater monitoring wells MW-A, MW-B, MW-C and MW-D will be performed during the annual groundwater sampling event in December 2021. DNAPL recovery wells are equipped with 3-foot sumps. DNAPL was detected during the October 2021 monitoring events in NW-3 and NW-4 as summarized below and detailed in the attached Table 1.

Recovery Well ID	DNAPL Thickness 10/7/21 (feet)	DNAPL Thickness 10/20/21 (feet)
NW-3	1.30	0.66
NW-4	0.41	0.93

Note: Measured DNAPL thicknesses are estimated.

- On October 8 and 21, 2021, AKRF performed oversight during DNAPL removal, which was completed by Eastern Environmental of Manorville, New York (Eastern). Measurable DNAPL was removed from recovery well NW-3 (~5.5 gallons total) utilizing a vacuum truck to apply vacuum on an internal 1-inch pipe within the recovery well. DNAPL was removed at NW-4 (~6 gallons) on October 21, 2021 only, as less than 0.5 feet of measurable DNAPL was detected during the October 7, 2021 gauging event (i.e., no DNAPL recovery required). The recovered DNAPL was containerized in a Department of Transportation (DOT)-approved 55-gallon drum, labeled as hazardous waste, and staged on-Site in Grid Cell E2 (see Figure 2) for off-site disposal at an appropriate receiving facility. Following DNAPL removal, the vacuum truck was decontaminated using a steam pressure washer with the decontamination fluids drummed on-Site.
- A total of approximately 11.5 gallons of DNAPL were recovered during the reporting period. Since DNAPL removal activities began in December 2019, a total of 423.5 gallons of DNAPL have been removed. DNAPL recovery totals are summarized in Table 2.

The following work is planned for November 2021:

- AKRF anticipates completing DNAPL gauging and removal in November 2021 using the same methods as described above while long-term trends and alternate recovery methods are evaluated;
- General site work above the Site-Wide Cover System;
- NAPL recovery well monitoring and DNAPL recovery at a frequency of once every two weeks; and
- Disposal, as needed, of recovered DNAPL (i.e., coal tar) and used personal protective equipment and field supplies.

If you have any questions or require additional information, please contact me at (914) 922-2387.

Sincerely,  
AKRF, Inc.

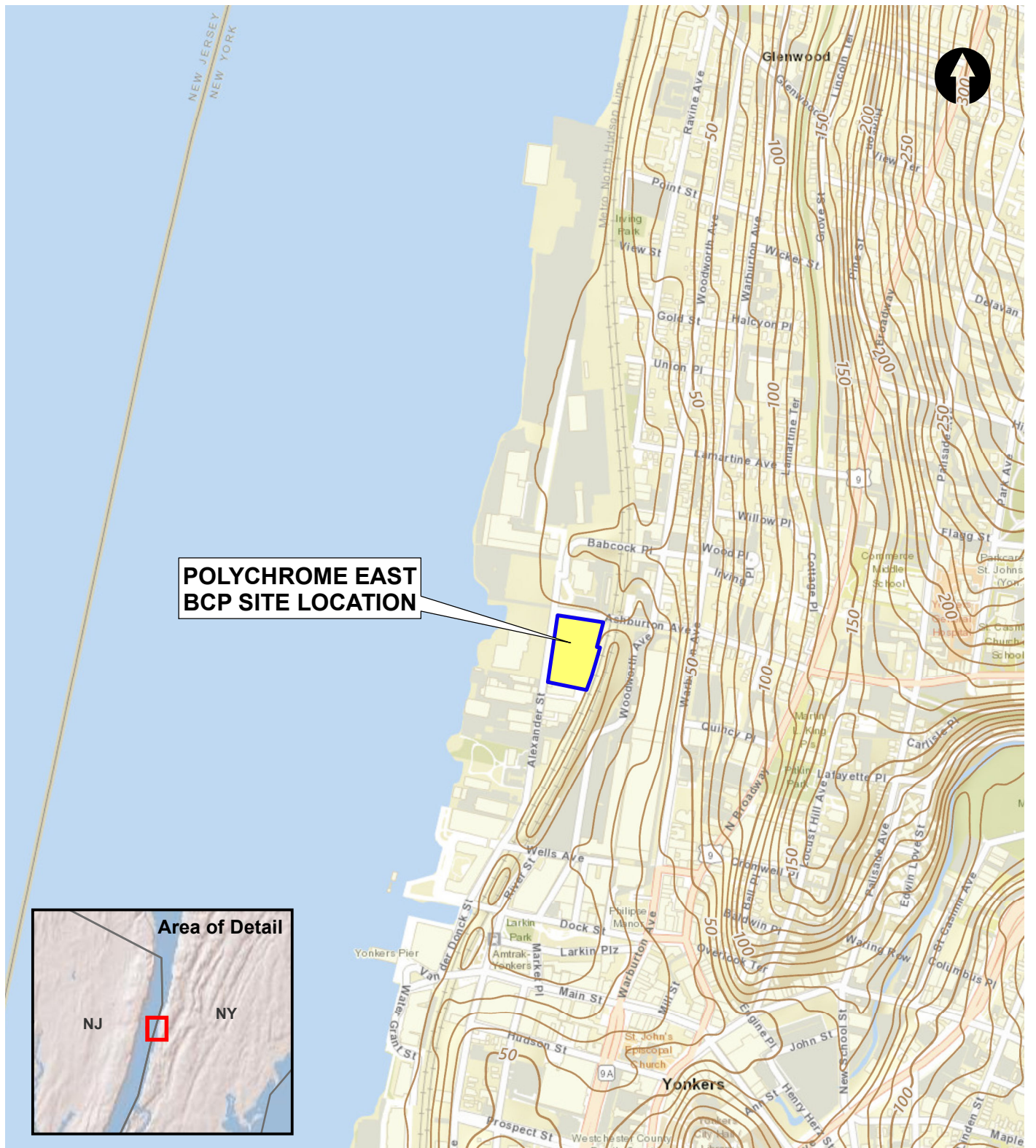


Patrick McHugh, P.E.  
Environmental Engineer

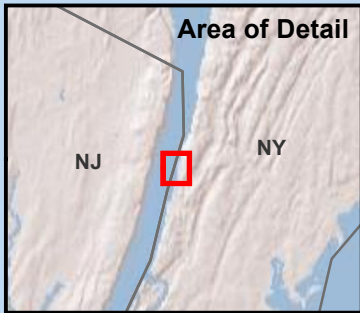
- Encl.: Figure 1 – Site Location Map  
 Figure 2 – Site Plan with Reference Grid  
 Figure 3 – NAPL Recovery & Groundwater Monitoring Well Location Plan  
 Table 1 – Polychrome East Well Gauging Measurements  
 Table 2 – Polychrome East DNAPL Recovery Totals

- cc (electronic copy only): Kevin Carpenter/Scott Deyette – NYSDEC  
 Saria Waugh – NYSDOH  
 Glen Moran/Christopher Reynolds/Jon Vogel/Michael Simpson – AVB  
 Scott Caporizzo/Marc Godick/Steve Grens/Rebecca Kinal – AKRF

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazard\Fig\_1 site loc map.mxd Fig\_1 site loc map.mxd 12/19/2019 3:07:42 PM mveilleux



**POLYCHROME EAST  
BCP SITE LOCATION**



Service Layer Credits: ESRI Worldwide Street Map data, 2019.

Map Source - BCP Site Boundary from Paulus, Sokolowski and Sartor Architecture & Engineering, P.C.  
 Stamped Survey Drawing Titled "Environmental Easement Area" - dated May 31, 2019.



34 S. Broadway #401, White Plains, NY 10601


**Polychrome East  
NYSDEC Site (BCP #C360098)  
Yonkers, New York**

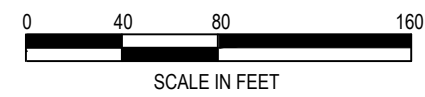
**SITE LOCATION MAP**

DATE	<b>12/19/2019</b>
PROJECT NO.	<b>180132</b>
FIGURE	<b>1</b>



**LEGEND**  
 PROJECT SITE BOUNDARY

**A**  
 ALPHANUMERIC GRID



Aerial Source:  
 2014 New York Statewide Digital Orthoimagery.



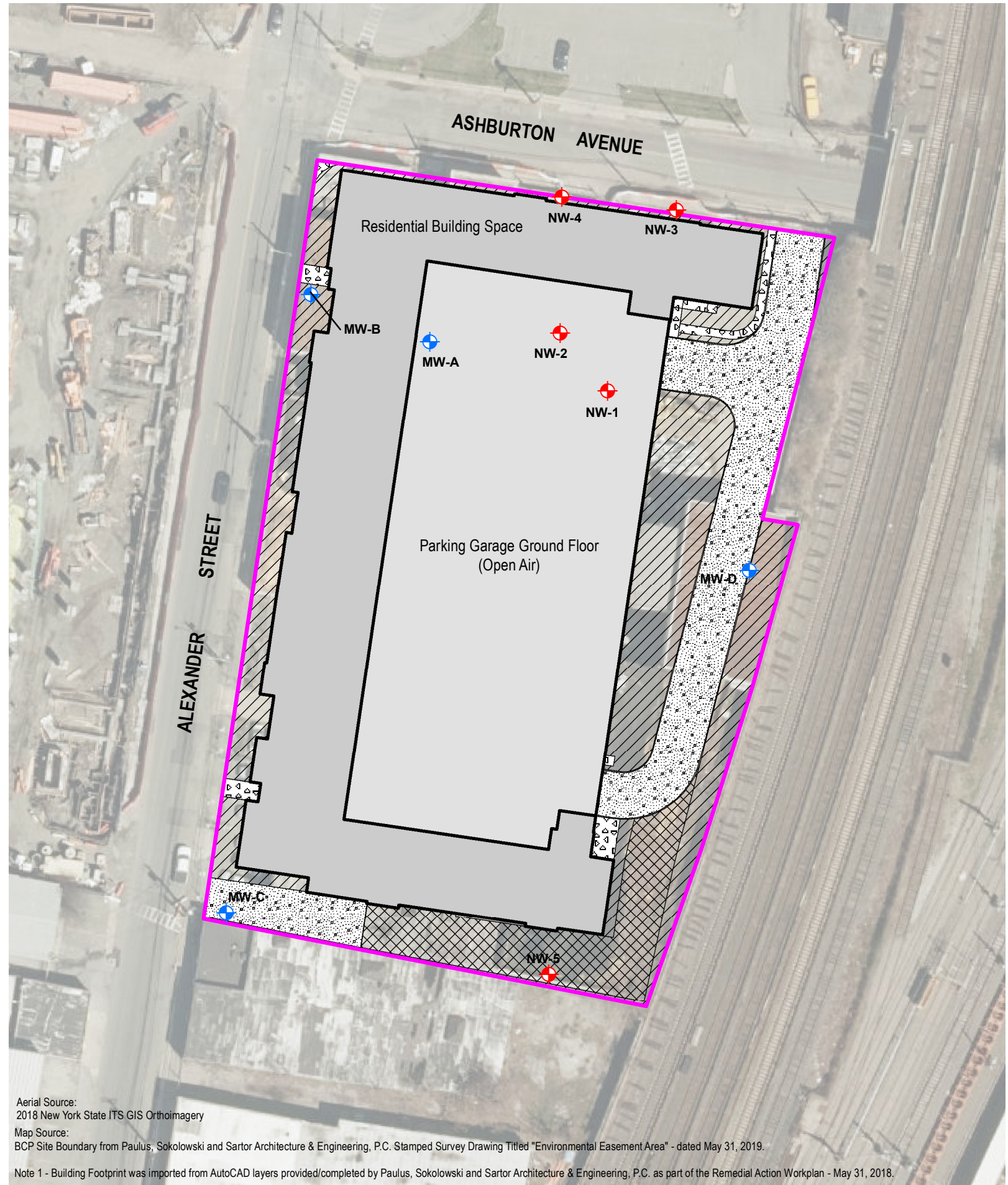
440 Park Avenue South, New York, NY 10016

**C360098 - Polychrome East**  
 80-94 Alexander Street, Yonkers, New York

**SITE PLAN WITH REFERENCE GRID**

DATE	<b>7/18/2018</b>
PROJECT NO.	<b>180132</b>
FIGURE	<b>2</b>

©2019 AKRF, C:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\FER180132 Fig 7 NAPL Recovery and GW Wells.mxd 12/20/2019 8:37:10 AM mvelieux



Aerial Source:  
2018 New York State ITS GIS Orthoimagery  
Map Source:  
BCP Site Boundary from Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. Stamped Survey Drawing Titled "Environmental Easement Area" - dated May 31, 2019.  
Note 1 - Building Footprint was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

**LEGEND**

- BCP SITE BOUNDARY
- RESIDENTIAL BUILDING SPACE
- PARKING GARAGE (OPEN AIR)
- SIDEWALK
- GRASS PAVER
- ASPHALT
- LANDSCAPED
- NAPL RECOVERY WELL LOCATION
- GROUNDWATER MONITORING WELL LOCATION



Table 1  
 Polychrome East  
 Yonkers, NY  
 Well Gauging Measurements

Well ID	Date	Time	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments	
NW-1	10/7/2020	10:30	ND	9.30	ND	27.03	NA	NA		
	10/21/2020	8:35	ND	9.06	ND	27.08	NA	NA		
	11/4/2020	6:30	ND	8.90	ND	27.00	NA	NA		
	11/18/2020	10:15	ND	8.93	ND	28.22	NA	NA		
	12/1/2020	9:55	ND	8.70	ND	27.05	NA	NA		
	12/16/2020	8:50	ND	8.77	ND	26.89	NA	NA		
	12/29/2020	8:40	ND	8.59	ND	26.97	NA	NA		
	1/13/2021	8:25	ND	8.89	ND	26.98	NA	NA		
	1/27/2021	8:40	ND	8.95	ND	26.98	NA	NA		
	2/8/2021	9:35	ND	9.08	ND	27.02	NA	NA		
	2/24/2021	8:40	ND	8.98	ND	26.97	NA	NA		
	3/10/2021	9:50	ND	8.76	ND	27.04	NA	NA		
	3/24/2021	8:53	ND	8.92	ND	27.04	NA	NA		
	4/7/2021	8:05	ND	8.81	ND	27.62	NA	NA		
	4/21/2021	8:50	ND	8.43	ND	27.02	NA	NA		
	5/5/2021	9:12	ND	8.55	ND	26.96	NA	NA		
	5/17/2021	9:15	ND	8.61	ND	26.90	NA	NA		
	6/2/2021	9:04	ND	8.16	ND	26.91	NA	NA		
	6/16/2021	9:19	ND	8.02	ND	27.19	NA	NA		
	6/30/2021	9:16	ND	8.39	ND	26.99	NA	NA		
	7/14/2021	8:35	ND	7.54	ND	26.97	NA	NA		
	7/27/2021	7:43	ND	7.51	ND	26.85	NA	NA		
	8/11/2021	10:50	ND	8.19	ND	26.97	NA	NA		
	8/23/2021	9:25	ND	6.93	ND	27.02	NA	NA		
	9/8/2021	9:02	ND	6.99	ND	27.03	NA	NA		
	9/21/2021	10:38	ND	8.03	ND	27.04	NA	NA		
	10/7/2021	9:20	ND	8.29	ND	26.97	NA	NA		
	10/20/2021	7:15	ND	8.50	ND	27.03	NA	NA		
	NW-2	10/7/2020	10:55	ND	9.11	ND	24.62	NA	NA	
		10/21/2020	8:30	ND	9.01	ND	24.73	NA	NA	
11/4/2020		6:40	ND	9.00	ND	24.77	NA	NA		
11/18/2020		10:10	ND	9.06	ND	25.69	NA	NA		
12/1/2020		9:50	ND	8.82	ND	24.82	NA	NA		
12/16/2020		8:55	ND	8.86	ND	24.66	NA	NA		
12/29/2020		8:45	ND	8.79	ND	24.68	NA	NA		
1/13/2021		8:20	ND	9.93	ND	24.72	NA	NA		
1/27/2021		8:45	ND	8.99	ND	24.66	NA	NA		
2/8/2021		9:40	ND	9.24	ND	24.71	NA	NA		
2/24/2021		8:50	ND	9.06	ND	24.56	NA	NA		
3/10/2021		9:55	ND	8.98	ND	24.68	NA	NA		
3/24/2021		8:50	ND	8.99	ND	24.62	NA	NA		
4/7/2021		8:10	ND	8.87	ND	24.54	NA	NA		
4/21/2021		8:55	ND	8.58	ND	24.61	NA	NA		
5/5/2021		9:15	ND	8.59	ND	25.61	NA	NA		
5/17/2021		9:10	ND	8.77	ND	24.54	NA	NA		
6/2/2021		9:04	ND	8.44	ND	24.53	NA	NA		
6/16/2021		9:25	ND	8.19	ND	24.66	NA	NA		
6/30/2021		9:12	ND	8.50	ND	24.63	NA	NA		
7/14/2021		8:40	ND	7.66	ND	24.57	NA	NA		
7/27/2021		7:41	ND	7.76	ND	24.57	NA	NA		
8/11/2021		10:55	ND	8.38	ND	24.68	NA	NA		
8/23/2021		9:20	ND	7.74	ND	24.59	NA	NA		
9/8/2021		9:04	ND	7.18	ND	24.64	NA	NA		
9/21/2021		10:39	ND	8.29	ND	24.63	NA	NA		
10/7/2021		9:25	ND	8.50	ND	24.57	NA	NA		
10/20/2021		7:20	ND	8.62	ND	24.61	NA	NA		
10/7/2020		11:45	ND	6.30	16.01	18.58	NA	2.57	Pre-pumping measurement	
10/14/2020		8:00	ND	6.20	18.40	18.40	NA	NA	Post-pumping measurement -4 gallons removed	
10/21/2020	10:10	ND	6.26	15.04	18.63	NA	3.59	Pre-pumping measurement		
10/21/2020	12:45	ND	6.26	ND	18.63	NA	NA	Post-pumping measurement -5 gallons removed		
11/4/2020	8:00	ND	6.30	15.55	18.72	NA	3.17	Pre-pumping measurement		
11/5/2020	8:15	ND	6.35	ND	18.74	NA	NA	Post-pumping measurement -4 gallons removed		
11/18/2020	11:05	ND	7.42	16.14	18.96	NA	2.82			
11/19/2020	7:45	ND	7.41	16.12	18.95	NA	2.83	Pre-pumping measurement		
11/19/2020	8:00	ND	7.43	ND	18.97	NA	NA	Post-pumping measurement -10 gallons removed		
12/1/2020	10:30	ND	6.11	15.40	18.69	NA	3.29	Pre-pumping measurement		
12/2/2020	8:35	ND	6.09	ND	18.72	NA	NA	Post-pumping measurement -30 gallons removed		
12/16/2020	10:30	ND	6.21	16.25	18.68	NA	2.43	Pre-pumping measurement		
12/18/2020	9:45	ND	6.40	ND	18.62	NA	NA	Post-pumping measurement -3 gallons removed		
12/29/2020	10:30	ND	6.20	17.70	18.65	NA	0.95			
12/30/2020	8:15	ND	6.19	17.70	18.65	NA	0.95	Pre-pumping measurement		
12/30/2020	8:45	ND	6.27	ND	18.65	NA	NA	Post-pumping measurement -3 gallons removed		
1/13/2021	9:55	ND	6.18	15.21	18.65	NA	3.44			
1/14/2021	7:40	ND	6.18	15.05	18.65	NA	3.60	Pre-pumping measurement		
1/14/2021	7:50	ND	6.54	ND	18.65	NA	NA	Post-pumping measurement -5 gallons removed		
1/27/2021	10:25	ND	6.36	16.40	18.73	NA	2.33			
1/28/2021	7:50	ND	6.60	16.40	18.73	NA	2.33	Pre-pumping measurement		
1/28/2021	7:55	ND	6.70	ND	18.73	NA	NA	Post-pumping measurement -4 gallons removed		
2/8/2021	10:30	ND	6.35	16.91	18.60	NA	1.69			
2/11/2021	9:45	ND	6.36	16.95	18.60	NA	1.65	Pre-pumping measurement		
2/11/2021	10:00	ND	6.40	ND	18.60	NA	NA	Post-pumping measurement -3 gallons removed		
2/24/2021	10:00	ND	6.30	16.75	18.59	NA	1.84			
2/25/2021	7:40	ND	6.32	16.75	18.59	NA	1.84	Pre-pumping measurement		
2/25/2021	7:45	ND	6.33	ND	18.60	NA	NA	Post-pumping measurement -3 gallons removed		
3/10/2021	11:10	ND	6.26	16.42	18.70	NA	2.28			
3/11/2021	7:55	ND	6.25	16.22	18.70	NA	2.28	Pre-pumping measurement		
3/11/2021	8:10	ND	6.26	ND	18.71	NA	NA	Post-pumping measurement -3 gallons removed		
3/24/2021	9:43	ND	6.28	17.55	18.60	NA	1.05			
3/25/2021	8:20	ND	6.19	17.45	18.61	NA	1.16	Pre-pumping measurement		
3/25/2021	8:30	ND	6.18	ND	18.64	NA	NA	Post-pumping measurement -4 gallons removed		
4/7/2021	8:15	ND	6.22	17.74	18.69	NA	0.95			
4/8/2021	6:50	ND	6.21	17.68	18.69	NA	NA	Pre-pumping measurement		
4/8/2021	7:44	ND	6.26	ND	18.65	NA	NA	Post-pumping measurement -6.5 gallons removed		
4/21/2021	9:00	ND	6.16	17.79	18.64	NA	0.85			
4/22/2021	7:20	ND	6.18	17.40	18.64	NA	1.24	Pre-pumping measurement		
4/22/2021	7:40	ND	6.21	ND	18.64	NA	NA	Post-pumping measurement -9 gallons removed		
5/5/2021	10:20	ND	6.21	16.75	18.63	NA	1.88			
5/6/2021	8:00	ND	6.22	17.81	18.63	NA	0.82	Pre-pumping measurement		
5/6/2021	8:45	ND	6.24	ND	18.64	NA	NA	Post-pumping measurement -9 gallons removed		
5/17/2021	10:10	ND	6.19	16.80	18.65	NA	1.85			
5/20/2021	8:00	ND	6.20	16.77	18.64	NA	1.87	Pre-pumping measurement		
5/20/2021	8:20	ND	6.26	ND	18.68	NA	NA	Post-pumping measurement -5 gallons removed		
6/2/2021	10:10	ND	6.03	16.31	18.64	NA	2.33			
6/3/2021	7:45	ND	6.00	16.30	18.64	NA	2.34	Pre-pumping measurement		
6/3/2021	8:00	ND	6.06	ND	18.64	NA	NA	Post-pumping measurement -5.5 gallons removed		
6/16/2021	10:15	ND	6.00	16.51	18.71	NA	2.20			
6/17/2021	7:15	ND	6.02	16.50	18.67	NA	2.17	Pre-pumping measurement		
6/17/2021	7:55	ND	6.05	ND	18.67	NA	NA	Post-pumping measurement -1.5 gallons removed		
6/30/2021	10:25	ND	6.15	17.10	18.72	NA	1.62			
7/1/2021	7:25	ND	6.15	17.10	18.72	NA	1.62	Pre-pumping measurement		
7/1/2021	7:30	ND	6.18	ND	18.72	NA	NA	Post-pumping measurement -3.4 gallons removed		



**Table 2**  
**Polychrome East**  
**Yonkers, NY**  
**DNAPL Recovery Totals**

Recovery Event	DNAPL Recovered Volume (gal)						Disposal Info		
	NW-1	NW-2	NW-3	NW-4	NW-5	Event Total	Date Generated	Off-Site Disposal Date	Disposal Location
<b>Dec-19</b>	NA	NA	1.5	7	NA	8.5	12/31/2019	2/21/2020	Veolia ES
<b>2020 Total</b>	NA	NA	149.5	121.5	NA	271	1/9/2020 – 12/30/2020	2/21/2020 – 2/11/2021	Veolia ES
<b>Jan-21</b>	NA	NA	9	9	NA	18	1/14, 1/28	2/11/2021	Veolia ES
<b>Feb-21</b>	NA	NA	6	4	NA	10	2/11, 2/25	5/3/2021	Veolia ES
<b>Mar-21</b>	NA	NA	7	4	NA	11	3/11, 3/25	5/3/2021	Veolia ES
<b>Apr-21</b>	NA	NA	15.5	4.5	NA	20	3/11, 3/25	5/3/2021	Veolia ES
<b>May-21</b>	NA	NA	14	6	NA	20	5/6, 5/20	8/11/2021	Veolia ES
<b>Jun-21</b>	NA	NA	7	2.5	NA	9.5	6/2, 6/17	8/11/2021	Veolia ES
<b>Jul-21</b>	NA	NA	13.6	5.1	NA	18.7	7/1, 7/15, 7/29	8/11/2021	Veolia ES
<b>Aug-21</b>	NA	NA	6.4	2.2	NA	8.6	8/12/2021, 8/24/21	*Pending	Veolia ES
<b>Sep-21</b>	NA	NA	7.3	9.4	NA	16.7	9/9/2021, 9/23/21	Pending	Veolia ES
<b>Oct-21</b>	NA	NA	5.5	6	NA	11.5	10/8/21, 10/21/21	Pending	Veolia ES
<b>TOTAL TO DATE:</b>						<b>423.5</b>	gallons		

**Notes:** \* On August 11, 2021, Veolia ES disposed of 20 gallons of DNAPL that were generated on May 6 and 20, 2021, 9.5 gallons of DNAPL that were generated on June 3 and 17, 2021, and 18.7 gallons of DNAPL that were generated on July 1, 15, and 29, 2021. The 8.6 gallons of DNAPL that were generated on August 12 and 24, 2021 and the 16.7 gallons of DNAPL that were generated on September 9, and 23, 2021 and the 11.5 gallons of DNAPL that were generated on October 8 and 21, 2021 are currently pending off-site disposal.

**DNAPL - Dense Non-Aqueous Phase Liquid**  
**NA - Not Applicable**