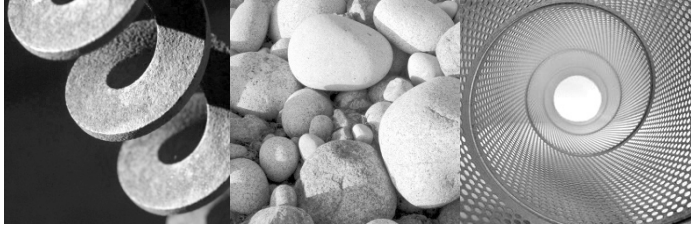

GEI Consultants

Consulting
Engineers and
Scientists

2020 Annual Report
Site Management Plan

Nyack Manufactured Gas Plant Site
Village of Nyack, Rockland County, New York

NYSDEC Site Number: 344046
Index # D3-001-98-08

Prepared For:
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December 2020
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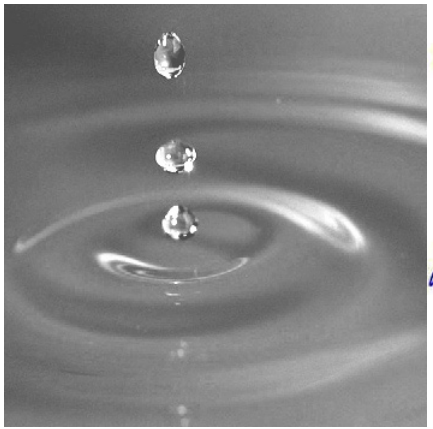

Wendy Moore, P.E.
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Joseph M. Simone

Joseph Simone, P.E.
Senior Consulting Engineer

Engineer's Certification

I, Wendy Moore, P.E., certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375, and that this Annual Report was prepared in accordance with the Site Management Plan (SMP) for the Nyack Former Manufactured Gas Plant (MGP) site, and all applicable statutes and regulations, and in substantial conformance with the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10).

December 17, 2020

Engineer's Seal
GEI Consultants, Inc., P.C.

Date

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.

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1. Introduction

This Site Management Plan (SMP) Annual Report for monitoring and inspection is required as an element of the post-remedial program at the Nyack Former Manufactured Gas Plant (MGP) site under the New York State Inactive Hazardous Waste Disposal Site Remedial Program administered by the New York State Department of Environmental Conservation (NYSDEC). The site was remediated in accordance with Order on Consent Index # D3-0001-98-08, Site #344046, which was executed on March 11, 1999.

1.1 General

Orange and Rockland Utilities, Inc. (O&R) entered into the above-referenced Order on Consent with the NYSDEC in 1999 to remediate the former Nyack MGP site located along Gedney Street in the Village of Nyack, Rockland County, New York. The Order on Consent required the Remedial Party (O&R) to investigate and remediate impacted media at the site.

The remediation of the site was performed over the course of several years and was completed in April 2015. The NYSDEC approved the Final Engineering Report (FER) (GEI, 2016a). Also approved by the NYSDEC was the SMP prepared by GEI in April 2016 (GEI, 2016b).

The SMP identifies the required post-remedial tasks, including:

- non-aqueous phase liquid (NAPL) gauging (and removal if present in measurable quantities),
- annual groundwater sampling, and
- annual inspection of post-remedial engineering controls.

In 2017, the ownership of the site changed to TZ Vista LLC (TZ Vista). TZ Vista is redeveloping the MGP site together with the "Hudson Vista parcel" (located immediately to the south of the site). From discussions with the Site Owner, it is O&R's understanding that construction of the new residential and commercial facility is currently awaiting local approvals but will likely take place over a two-year period following approvals. Phase 1 construction includes construction activities predominately on the Hudson Vista parcel and was scheduled for 2019; however, it was observed that the construction has not begun as of the October 6, 2020 site inspection. Phase 2 construction is planned for the MGP site following completion of the Phase 1 activities.

It is O&R's understanding that the Site Owner (TZ Vista) is corresponding directly with the NYSDEC Division of Environmental Remediation (DER) regarding the elements identified

in the SMP that are not the responsibility of the Remedial Party (O&R). Several of these elements are discussed in this report.

1.2 Site Location and Description

The location of the site is shown on Figure 1. The current site plan is shown on Figure 2. As depicted on Figure 2, the site was divided into two operable units (OUs) by the NYSDEC, for implementation of the remedy (NYSDEC, 2011). The operable units include:

- **OU1** – The portion of the site above the 100-year flood line, including Upper Terrace, the upland portion of the Lower Terrace, and the Hudson Vista Associates Parcel parking lot.
- **OU2** – Portion of the Lower Terrace located below the 100-year flood line and above the mean high water mark of the Hudson River, and also the Hudson River sediment that was impacted by MGP site-related residuals.

Eastern Parcel

The street address of the area of the former MGP operations is 55 Gedney Street, Nyack, New York (the "Eastern Parcel"). The Tax ID for the Eastern Parcel is 66.39-01-01.

The Eastern Parcel occupies an approximately 4-acre area in total, which includes about 2.17 acres of land, and 1.8 acres of submerged land in the Hudson River. The upland consists of an upper area along Gedney Street (the "Upper Terrace") separated by a steep slope from a lower area along the Hudson River (the "Lower Terrace"). The parcel is bounded by the Nyack Boat Club to the north, the Hudson Vista Parcel to the south, the Hudson River to the east, and Gedney Street to the west.

Impacted soil and former MGP subsurface foundations in the Upper Terrace were addressed during remediation through excavation and off-site disposal (outlined in gold on Figure 2). MGP-related constituents of concern (COC) remain in groundwater within the bedrock unit present approximately 20 feet below the ground surface of the Upper Terrace area. A soil cover system was installed during implementation of the remedy in the Upper Terrace (diagonal grey hatching on Figure 2).

Impacted soil in the Lower Terrace and the Shoreline Area along the Hudson River were addressed by in-situ solidification (ISS) (within areas outlined in blue and purple on Figure 2). MGP-related COC remain in these areas; however, the ISS process has created a low permeability mass which has encapsulated the COC, which eliminates the potential for further NAPL mobility and continued contaminant migration to groundwater or the river. A soil cover system was also installed during implementation of the remedy in the Lower Terrace (diagonal grey hatching on Figure 2). Riprap was installed to protect the shoreline from erosion for the Shoreline Area.

The Eastern Parcel is fenced to prevent trespassing. The Eastern Parcel, including the shoreline and off-shore portions, is subject to control under this SMP, as shown on Figure 2. It is GEI's understanding that the Eastern Parcel will be redeveloped as a residential / commercial facility by the Site Owner.

Hudson Vista

Impacted soil in the lower parking lot area of the Hudson Vista Parcel, located immediately south of the Lower Terrace of the Eastern Parcel, was remediated through ISS of soils as a part of the OU1 remedial action (outlined in green on Figure 2). MGP-related COC remain in the subsurface of this area; however, the ISS process has encapsulated the COC within a low permeability mass. The ISS process eliminates the treated area as a source for future groundwater impact. The cover system in the Hudson Vista remedial area consists of the parking lot pavement, which was restored following the remedial action (diagonal grey hatching on Figure 2). The Hudson Vista Parcel's lower parking lot area is considered an off-site area, but is subject to the requirements of the SMP because MGP-related COC remain within the solidified subsurface soils in the parking lot area.

Western Parcel

A single gas holder was formerly located on the parking lot parcel to the west of the Eastern Parcel (across Gedney Street). The Western Parcel has a Tax ID of 66.38-02-14, and a street address of 26 Lydecker Street, Nyack, New York. The absence of MGP-related impact at the Western Parcel was demonstrated during the Remedial Investigation (RI), and remedial activities were not required for this parcel. The Western Parcel is not subject to the SMP, and SMP activities have not been performed in the Western Parcel.

2. SMP Field Activities and Results

As specified in the SMP, field activities include:

- The assessment of the presence or absence of light phase non-aqueous phase liquid (LNAPL), and dense phase non-aqueous phase liquid (DNAPL) at identified site well locations.
- Groundwater monitoring at identified site well locations.

2.1 SMP Implementation Work Plan

To present the proposed scope of work for the 2017 SMP field activities to the NYSDEC, GEI (on behalf of O&R) prepared the work plan document entitled "*2017 Site Management Plan Implementation Work Plan, Nyack Former MGP Site, NYSDEC Site # 3-44-046,*" dated May 16, 2017 (GEI, 2017). The NYSDEC indicated approval of the work plan in email correspondence to O&R dated July 13, 2017.

NAPL gauging and groundwater sampling are performed consistent with the SMP (GEI, 2016b) and SMP Implementation Work Plan (GEI, 2017) to the extent possible. Certain unavoidable deviations from the work plan, resulting from owner activities, are identified below.

2.2 Reconnaissance and Observed Well Conditions

Monitoring well details are summarized in Table 1, and the well locations are shown on Figure 3. A reconnaissance was performed at the site on October 6, 2020 to confirm the location and condition of each of the monitoring wells identified in the SMP prior to implementing SMP activities. The conditions observed at each well, and the activities performed at each location in 2020 are summarized as follows:

- **MW33D** – Well and surrounding conditions have not changed since 2018, when the Site Owner performed excavation work in the area immediately to the south of (within 10 feet of) MW33D, as part of the Hudson Vista Phase 1 Redevelopment (subsurface parking garage) construction. Due to the adjacent excavation, it is not safe to access the well and sampling was not performed at this location in 2020.
- **MW41** – As described in the 2017 and 2018 Annual Reports, this well was destroyed. Specifically, it appears that the uppermost two feet of fill was removed by soil placement and grading activities that the Site Owner performed in the area some time prior to the 2017 inspection. Based on a survey performed in December 2017, the ground surface was approximately 2 feet lower than it was at the time of the well

installation. Because the well cannot be located, NAPL gauging and groundwater sampling was not performed at this location.

- **MW43 –** The well was located and sampled in October 2020.
- **MW44 –** The well was located, gauged and sampled in October 2020. A measurable thickness (4.87 feet) of LNAPL was identified at this location. The LNAPL was removed, and a groundwater sample was collected after the well had stabilized for two weeks.
- **MW45 –** In December 2017, MW45 was found to be covered by a pile of soil estimated to be 7-10 feet in height, which remains in place at present. Therefore, NAPL gauging and groundwater sampling was not performed at this well location.
- **MW46** – The well was located and gauged in October 2020. A measurable thickness (0.09 feet) of LNAPL was identified at this location. The LNAPL was removed; however, a sample could not be collected due to an obstruction in the well approximately 4 feet below the surface that prevented the sampling equipment from being lowered to the well screen. Attempts to remove the obstruction were unsuccessful.
- **MW47** – The well was located, gauged, and sampled in October 2020. A trace amount of DNAPL blebs were observed in the monitoring well purge water at this location; however, a measurable thickness of DNAPL was not identified.

The Site Management Plan states that, if redevelopment occurs, the owner must either protect monitoring wells for continued use, or abandon and replace them with new wells at locations which allow for continued groundwater monitoring at locations approved by the NYSDEC. O&R anticipates that the Site Owner will properly abandon and replace the damaged wells as site redevelopment progresses.

2.3 NAPL Monitoring and Removal

Table 2 summarizes the NAPL monitoring performed in 2020, as well as the prior post-remedial monitoring events. For the gauging performed in 2020, MW44 and MW46 were found to contain a measurable thickness of LNAPL. As shown on Table 2, the NAPL was removed on October 6, 2020 and groundwater samples were collected from each well on October 21, 2020 (Section 2.5).

2.4 Groundwater Elevation Monitoring

The results of the elevation monitoring performed on October 6, 2020 are provided in Table 1 and Figure 3.

The elevation of groundwater was highest in bedrock well MW47 (11.53 feet NAVD88), which is located along Gedney Street. The elevation of groundwater was found to be lowest

in overburden well MW43 (1.85 feet NAVD88). The difference in elevation across the site was 9.68 feet. The results indicate that, consistent with the results of the RI, groundwater flow is from the west to the east across the site, towards the Hudson River. The inferred direction of groundwater flow is shown on Figure 3.

2.5 Groundwater Sampling

Three wells (MW43, MW44, and MW47) were purged and sampled on October 21, 2020 according to the methods described in the SMP.

2.5.1 Groundwater Analyses and Results

Groundwater samples were analyzed by Test America (TA) Laboratory for benzene, toluene, ethyl benzene and xylenes (BTEX) by EPA Method 8260C, and polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270D. The results of the analyses are presented in Table 3, and on chemical summary boxes included on Figure 4. The figure also summarizes post-remedial data collected from 2015 to 2019 to provide a comparison and show potential trends within each well. The laboratory chain-of-custody record and the Form I laboratory report sheets for the 2020 analyses are included in Appendix A.

- **MW43** – Similar concentrations of COC have been detected for the post-remedial sampling events performed at this location.
- **MW44** – Concentrations of COC have generally decreased relative to 2015 with some variability in the results (Figure 4). LNAPL also continues to be identified at this well location, with a greater thickness observed in 2020 than in recent years.
- **MW47** – A decreasing trend for COC was previously identified at this well location from 2018 to 2019, and 2020 concentrations are similar to 2019. It is possible that groundwater conditions are stabilizing at this new (installed 2017) bedrock well location.

The annual monitoring required at these well locations will continue to evaluate increasing or decreasing trends for COC and NAPL in groundwater at the site.

2.6 Soil Vapor Intrusion

Post-remedial soil vapor intrusion (SVI) monitoring has not been performed at the site. It is GEI's understanding that the site is being redeveloped by the Site Owner, and the Site Owner will provide the NYSDEC with a Soil Vapor Intrusion Monitoring Plan (SVI MP) and will collect any samples required in the SMP and SVI MP. It is GEI's understanding that the building to be constructed at the site by the Site Owner includes controls to address the potential for vapor intrusion of MGP-related COC to indoor air.

3. Environmental Controls / Institutional Controls and Site Inspection

3.1 General

Because COC in soil, bedrock, groundwater, and sediment remain in the subsurface of the site, Engineering Controls and Institutional Controls (EC/ICs) are required to protect human health and the environment.

3.2 Engineering Controls

The ECs identified in the SMP, and the results of the inspection performed by GEI, are discussed below. The 2020 SMP Annual Inspection Form is included in Appendix B.

3.2.1 Cover System Monitoring

An annual site inspection was performed on October 6, 2020 to observe the condition of the cover systems at:

- Upper Terrace,
- ISS area in the Lower Terrace, and
- ISS area on the Hudson Vista Associates Parcel.

The locations of each of these remedial areas are shown on Figure 2. Photographs taken during the site inspection are included in the Photographic Record.

As indicated in the site inspection form, the cover system in each of the identified remedial areas remains in place, does not appear to have been disturbed during the current monitoring period, and continues to be effective at preventing direct exposure to COC present in the subsurface.

3.2.2 Storm Sewer and Water Service

Two site utilities were previously discussed in the 2016 SMP document:

- Underground Village of Nyack storm sewer line is present near the southern property line of the Eastern Parcel, terminating at an outfall on the Hudson Vista Associates Parcel; and

- Village of Nyack water line present at the fire hydrant located at the western side of the Eastern Parcel.

These features were observed to be present, and not disturbed at the time of the October 6, 2020 site inspection. A photograph of the storm sewer outlet is included in Photographic Record in Appendix B.

3.2.3 Shoreline Area

Along the Lower Terrace shoreline, the ISS materials are protected from contact by site uses and erosion by the installation of riprap during the remedial action, and by the placement of additional riprap at the shoreline by the Site Owner. All riprap areas were observed by GEI to be in good condition. Evidence of movement or undermining was not observed. Photographs of the shoreline are included in Photographic Record in Appendix B.

It is GEI's understanding that the Site Owner plans to install additional shore protection features during redevelopment, and that the Site Owner has proposed the methods and materials to be utilized to the NYSDEC DER.

3.2.4 Off-shore Area

The area off-shore (east) from the Lower Terrace protected shoreline is a mix of sandy and silty native sediments. The sediment has been dredged to elevation -6 to -10 feet in accordance with the Record of Decision (ROD) (NYSDEC, 2011). As specified in the SMP, to prevent these materials from being exposed at the sediment-water interface, the sediment surface should not be dredged, excavated, or deeply disturbed.

Evidence of dredging, the excavation of sediment, or other activities that may result in the disruption of the sediment remedial area was not observed during the site inspection performed by GEI on October 6, 2020.

3.3 Institutional Controls

The Eastern Parcel has a series of ICs in the form of site restrictions. Adherence to these ICs is required by the Environmental Easement. Site restrictions that apply to the Eastern Parcel, as defined in the SMP, are:

- The property may only be used for restricted residential use, commercial use and/or industrial use provided that the long-term Engineering and Institutional Controls included in this SMP are employed.
- The property may not be used for a higher level of use, such as unrestricted residential use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC.

- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with this SMP.
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use.
- The potential for vapor intrusion must be evaluated for any buildings developed in the area of the site, and potential impacts that are identified must be monitored or mitigated.
- Vegetable gardens and farming on the property are prohibited.

Based on the inspection of the site performed by GEI and correspondence with O&R, the Site Owner and the NYSDEC, the ICs identified in the SMP adhere to the requirements of the Environmental Easement, remain in place, and are effective for OU1 and OU2 of the site. The site remedy continues to be protective of public health and the environment as described in the FER.

4. Conclusions

4.1 2020 SMP Annual Report Conclusions

Conclusions for this Annual Report are:

- **Site Ownership**: The ownership of the site continues to be TZ Vista LLC. Significant change in site conditions relative to the prior inspection were not observed. Construction for parcel redevelopment continues to be delayed at the time of the annual inspection.
- **Media Monitoring**: Media monitoring tasks identified in the SMP were performed in 2020, including: NAPL gauging and removal, and groundwater sampling.
- **Engineering Controls**: The inspection of the site was performed in 2020, as specified in the SMP.
    - The inspection documented the effectiveness of the engineering controls.
    - The engineering controls employed at the Nyack MGP site are unchanged from the date the control was put in place, or last approved by the NYSDEC. As reported in 2017, the site has been graded in some areas[1] and additional materials have been added by the Site Owner in other areas. However, no additional grading or materials appear to have been added since the November 2018 inspection.
- **Institutional Controls**: Based on the site inspection performed by GEI and on correspondence with O&R, the Site Owner and the NYSDEC, conclusions related to the ICs include:
    - The institutional controls employed at the Nyack MGP site are unchanged from the date the control was put in place, or last approved by the NYSDEC.
    - Nothing has occurred that would impair the ability of the control to protect the public health and environment.
    - Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control.
    - Access to the site will continue to be provided to the NYSDEC to evaluate the remedy, including access to evaluate the continued maintenance of this control.
    - Use of the site is compliant with the environmental easement.

[1] Specifically, as discussed in Section 2.2, it appears that the Site Owner conducted grading in the Upper Terrace in the vicinity of MW41, resulting in a ground surface approximately 2 feet lower now than it was at the time of the well installation in 2008. Approximately 10 feet of imported general fill had been placed in that area during remediation in 2006; as such, approximately 8 feet of fill remains.

4.2 2021 SMP Implementation

The field activities and annual inspection for the implementation of the SMP that are the responsibility of O&R as the Remedial Party will be next implemented in 2021 with prior notice to the NYSDEC DER.

5. References

GEI, 2016a. Final Engineering Report, Nyack Manufactured Gas Plant Site, Rockland County, New York, NYSDEC Site Number 344046, May 2016.

GEI, 2016b. Site Management Plan, Nyack Former Manufactured Gas Plant Site, Rockland County, New York, NYSDEC Site Number 344046, April 2016.

GEI, 2017. 2017 Site Management Plan Implementation Work Plan, Nyack Former MGP Site, NYSDEC Site # 3-44-046, dated May 16, 2017.

NYSDEC, 2004. Record of Decision, Nyack Gas Plant Site Operable Unit No. 1 Former Plant Site, Nyack, Rockland County, New York, Site Number 344046, March 2004.

NYSDEC, 2011. Record of Decision, OR – Nyack, MGP, Operable Unit Number: 02. Nyack, Rockland County, Site No. 344046, March 2011.

Tables

Table i
Acronym and NYSDEC Reference Key
for Analytical Summary Tables

Groundwater Notes:

NYSDEC References:
GW STD - New York Groundwater Guidance or Standard Values - NYSDEC, Division of Water, TOGS (1.1.1) [NYSDEC, 1998], with Addendums.
s = Standard Value
g = Guidance Value

62	**Bold value** - analyte estimated or detected at a concentration greater than the method detection limit.
62	**Gray Shaded value** - analyte estimated or detected at concentration greater than the NYSDEC Groundwater Standard or Guidance Values.

Units for groundwater samples:
µg/L = micrograms/Liter = parts per billion
mg/L = milligrams/Liter = parts per million

Laboratory or Validation Qualifiers:
B = For organics analysis - compound was found in the associated blank sample. For metals analysis - the result is an estimated quantity.
B = For inorganic analysis - analyte detected in the associated method blank.
E = Analyte concentration exceeded the calibration range of the instrument.
F = MS and/or MSD Recovery is outside acceptance limits.
F1 = MS and/or MSD Recovery is outside acceptance limits.
F2 = MS/MSD RPD exceeds control limits.
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J- = The result is an estimated quantity, likely to be biased low. The associated numerical value is the approximate concentration of the analyte in the sample.
J+ = The result is an estimated quantity, likely to be biased high. The associated numerical value is the approximate concentration of the analyte in the sample.
N = Tentative identification. Consider present. Special methods may be needed to confirm its presence or absence in future sampling events.
R = The data are unusable. The sample results are rejected due to serious deficiencies in the ability to meet quality control criteria.
U = The analyte was analyzed for, but was not detected above the level reported.
UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximated and may be inaccurate or imprecise.
BW - Analyte detected in the associated method blank and post-digest spike recovery furnace analysis was out of 85-115 percent control limit, while sample absorbance was less than 50 percent of spike absorbance.
BWN - Analyte detected in the associated method blank and post-digest spike recovery furnace analysis was out of 85-115 percent control limit, while sample absorbance was less than 50 percent of spike absorbance. Analyte is presumptively present.
UW - Not detected at or above the reporting limit shown and post-digest spike recovery furnace analysis was out of 85-115 percent control limit, while sample absorbance was less than 50 percent of spike absorbance.
JB - Estimated value and the analyte was detected in the associated method blank.
* = LCS or LCSD is outside acceptance limits.

Other Notes:
NA = Not analyzed for, Not applicable
ND = Not detected. Total concentration is listed as ND because no compounds were detected in the group (such as for Total BTEX).
NE = Not established
NL = Not Listed
PAHs - polycyclic aromatic hydrocarbons
SVOCs - semi-volatile organic compounds
TAL - Target Analyte List
TCL - Target Compound List

BTEX and Total PAHs are calculated using detects only.
Total VOCs includes all BTEX compounds.
Total SVOCs includes all PAH compounds.

Table 1
Groundwater Monitoring and Sample Summary
Nyack MGP Site 2020 SMP Annual Report

Well Construction Summary									2020 Water Level Gauging Summary				2020 Sampling SOW	
Designation	Installation Date	Ground Surface Elevation (ft AMSL)	Top of PVC Riser Elevation (ft AMSL)	Screened Interval (ft AMSL)	Northing (NAD83)	Easting (NAD83)	Well Location	Purpose	Depth to Water 10/6/2020 (ft BTOC)	Water Elevation 10/6/2020 (ft AMSL)	NAPL Presence (Table 2)	Well Condition Comments	BTEX	PAHs
MW33D	8/31/2004	25.33	25.16	-0.16 to 15.16	822865.99	653222.97	Southern site boundary, cross-gradient location	Monitor groundwater flow around ISS mass to the south	NM	NM	NM	Not accessible due to unsafe condition; immediately adjacent to open excavation	--	--
MW41	5/19/2008	34.07	33.79	-0.71 to 14.29	823022.67	653236.45	Within Upper Terrace	Monitor on-site groundwater and residual NAPL conditions in bedrock	NM	NM	NM	Not accessible; destroyed or buried following grading	--	--
MW43	5/22/2008	8.60	9.04	-19.22 to -14.22	823061.51	653448.31	Downgradient	Monitor groundwater in overburden between bedrock and the hanging ISS mass	7.19	1.85	None	Well in good condition	X	X
MW44	5/20/2008	33.84	33.55	1.55 to 16.55	823072.61	653244.4	Within Upper Terrace	Monitor on-site groundwater and residual NAPL conditions in bedrock	28.71	4.84	LNAPL	Well in fair condition (surface completion has broken bolt connectors)	X	X
MW45	5/23/2008	14.15	13.84	-13.66 to 1.34	822983.34	653307.75	Within Lower Terrace; downgradient location	Monitor potential on-site groundwater mounding at upgradient side of ISS mass	NM	NM	NM	Not accessible; covered by soil pile	--	--
MW46	12/5/2017	27.00	26.73	16.0 to 8.0	823178.96	653260.92	Northern site boundary, cross-gradient location	Monitor groundwater flow around ISS mass	22.84	3.89	LNAPL	Well in good condition	X	X
MW47	12/6/2017	34.20	33.87	19.7 to -2.3	823089.60	653160.11	Western site boundary (at Gedney Street)	Monitor upgradient groundwater conditions	22.34	11.53	DNAPL	Well in good condition	X	X

Notes:

ft BTOC = feet below top of casing (measuring point)

ft AMSL = feet above mean sea level (negative values are below mean seal level)

NM = Not measured; well is inaccessible as the result of activities by others

-- = Not applicable; well is inaccessible as the result of activities by others

Horizontal Coordinates are New York State Plane, Central Zone, NAD83 North American Datum 1983 (NAD83)

Vertical Coordinates are North American Datum 1988 (NAVD88)

Table 2
SMP Post-Remedial NAPL Gauging and Removal Summary
Nyack MGP Site 2020 SMP Annual Report

Well ID:	MW41 (Note 1)												
Date:	2/27/2015	3/13/2015		3/20/2015		3/27/2015		4/10/2015		5/22/2015		7/17/2015	
	Before Purging	Before Purging	After Purging	Before Purging	After Purging	Before Purging	After Purging	Before Purging	After Purging	Before Purging	After Purging	Before Purging	After Purging
Depth to LNAPL	21.27	NP	NP	NP	NP	NP	NP	20.46	NP	20.70	NP	20.94	NP
Depth to Water	21.29	20.80	20.92	20.31	20.39	20.36	20.54	20.46	20.63	20.71	21.25	20.95	22.42
Depth to DNAPL	*	33.66	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Depth to Bottom of Well	34.25	34.25	34.25	34.25	34.25	34.25	34.25	34.25	34.25	34.24	34.24	34.25	34.25
LNAPL thickness	0.02	NP	NP	NP	NP	NP	NP	<0.01	NP	~0.01	NP	~0.01	NP
DNAPL thickness	*	0.59	NP	**	NP	**	NP	Blebs	NP	Blebs	NP	Blebs	NP

Well ID:	MW44												
Date:	2/27/2015	3/13/2015		3/20/2015		3/27/2015		4/10/2015		5/22/2015		7/17/2015	
	Before Purging	Before Purging	After Purging	Before Purging	After Purging	Before Purging	After Purging	Before Purging	After Purging	Before Purging	After Purging	Before Purging	After Purging
Depth to LNAPL	26.12	25.13	25.41	24.43	NP	24.53	NP	24.59	NP	25.25	NP	25.52	NP
Depth to Water	27.35	25.23	25.42	24.57	25.21	24.65	25.38	24.69	25.03	25.35	26.05	25.62	28.06
Depth to DNAPL	*	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Depth to Bottom of Well	32.33	32.33	32.33	32.33	32.33	32.33	32.33	32.33	32.33	32.30	32.30	32.30	32.30
LNAPL thickness	1.23	0.10	0.01	0.14	NP	0.12	NP	0.10	NP	~0.10	NP	~0.10	NP
DNAPL thickness	*	Blebs	Blebs	Blebs	NP	Blebs	NP	Blebs	NP	NP	NP	NP	NP

Well ID:	MW44 (continued)							
Date:	9/20/2017		11/12/2018		6/14/2019		10/6/2020	
	Before Purging	After Purging	Before Purging	After Purging	Before Purging	After Purging	Before Purging	After Purging
Depth to LNAPL	24.44	NP	24.42	24.42	23.96	NP	23.84	NP
Depth to Water	25.94	25.94	24.43	24.43	24.05	24.00	28.71	27.51
Depth to DNAPL	NP	NP	NP	NP	NP	NP	NP	NP
Depth to Bottom of Well	32.30	32.30	32.30	32.30	32.25	32.25	33.24	33.24
LNAPL thickness	1.50	NP	0.01	NP	0.09	NP	4.87	NP
DNAPL thickness	NP	NP	Blebs	Blebs	Blebs	Blebs	NP	NP

Well ID:	MW46			
Date:	11/12/2018		10/6/2020	
	Before Purging	After Purging	Before Purging	After Purging
Depth to LNAPL	NP	NA	22.75	NP
Depth to Water	21.15	NA	22.84	22.85
Depth to DNAPL	NP	NA	NP	NP
Depth to Bottom of Well	39.45	NA	39.73	39.73
LNAPL thickness	NP	NA	0.09	NP
DNAPL thickness	NP	NA	NP	NP

Well ID:	MW47					
Date:	11/12/2018		6/14/2019		10/6/2020	
	Before Purging	After Purging	Before Purging	After Purging	Before Purging	After Purging
Depth to LNAPL	NP	NA	NP	NA	NP	NA
Depth to Water	17.1	NA	16.95	NA	22.34	NA
Depth to DNAPL	NP	NA	NP	NA	NP	NA
Depth to Bottom of Well	38.0	NA	37.98	NA	38.71	NA
LNAPL thickness	NP	NA	NP	NA	NP	NA
DNAPL thickness	Blebs	NA	Blebs	NA	Blebs	NA

Notes:

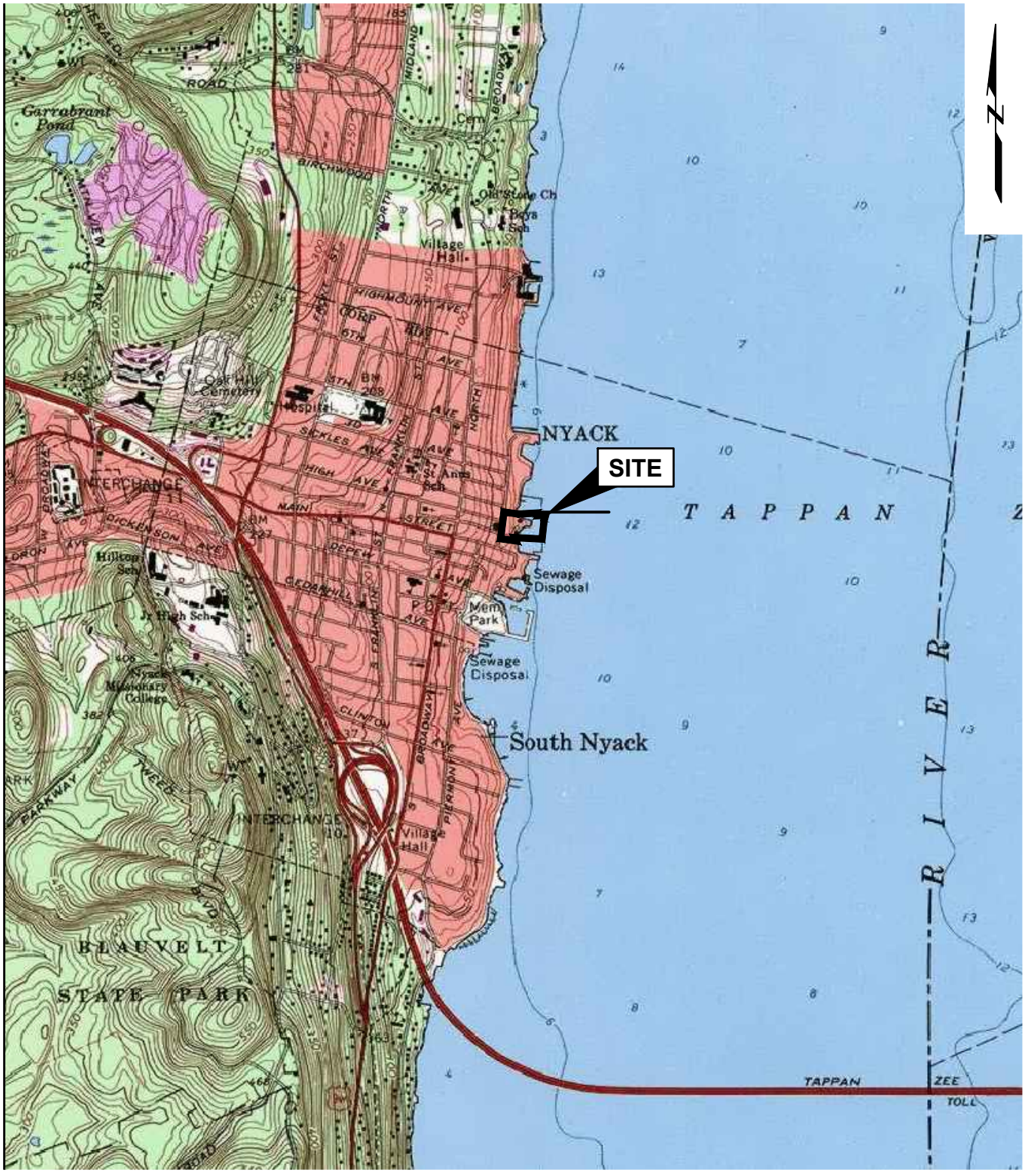
1. Wells MW41 and MW45 could not be located 2017 through present due to construction activities by owner; presumed destroyed. MW33D is inaccessible due to construction activities by owner. (See report for details.)
2. Only those wells in which NAPL has been observed at least once are included in this table.
3. Depth and thickness measurements are in feet.
4. Includes data collected post-remediation, 2015 through present.
5. * indicates that accurate DNAPL measurement could not be determined in the field due to freezing conditions.
6. ** indicates that DNAPL was not detected with oil/water interface probe, but small quantity (~50 to 100 mL) observed during subsequent purging.

NA = Not applicable (not purged because measurable NAPL not present)
NAPL = Non-aqueous phase liquid (prefix L = light; D = dense)
NP = Not present

Table 3
Groundwater Analytical Data Summary
Nyack MGP Site 2020 SMP Annual Report

			Location Name Sample Name Sample Date	MW43 MW43 10/21/2020	MW44 MW44 10/21/2020	MW47 MW47 10/21/2020
Analyte	**Units**	**CAS No.**	**NYS AWQS**			
BTEX	ug/L					
Benzene		71-43-2	1	**3.7**	**16**	**410**
Toluene		108-88-3	5	1 U	1 U	**68**
Ethylbenzene		100-41-4	5	**0.8 J**	**11**	**170**
Total Xylene		1330-20-7	5	2 U	**10**	**220**
Total BTEX (ND=0)		TBTEX_ND0	NE	**4.5**	**37**	**868**
PAH17	ug/L					
Acenaphthene		83-32-9	20*	2 U	**1800**	**40**
Acenaphthylene		208-96-8	NE	2 U	**270**	**11**
Anthracene		120-12-7	50*	2 U	**1200**	**6.5**
Benzo(a)anthracene		56-55-3	0.002*	2 U	**1100**	**1.5 J**
Benzo(b)fluoranthene		205-99-2	0.002*	2 U	**550**	2.1 U
Benzo(k)fluoranthene		207-08-9	0.002*	2 U	**190**	2.1 U
Benzo(g,h,i)perylene		191-24-2	NE	2 U	**370**	2.1 U
Benzo(a)pyrene		50-32-8	ND	2 U	**820**	**1.2 J**
Chrysene		218-01-9	0.002*	2 U	**880**	**1.2 J**
Dibenz(a,h)anthracene		53-70-3	NE	2 U	**91**	2.1 U
Fluoranthene		206-44-0	50*	2 U	**1700**	**4.4**
Fluorene		86-73-7	50*	2 U	**1200**	**22**
Indeno(1,2,3-cd)pyrene		193-39-5	0.002*	2 U	**260**	2.1 U
2-Methylnaphthalene		91-57-6	NE	2 U	**3800**	**65**
Naphthalene		91-20-3	10*	**0.65 J**	**11000**	**580 F1**
Phenanthrene		85-01-8	50*	2 U	**4200**	**36**
Pyrene		129-00-0	50*	2 U	**2600**	**6.9**
Total PAH (17) (ND=0)		TPAH17_ND0	NE	**0.65**	**32031**	**775.7**

Figures

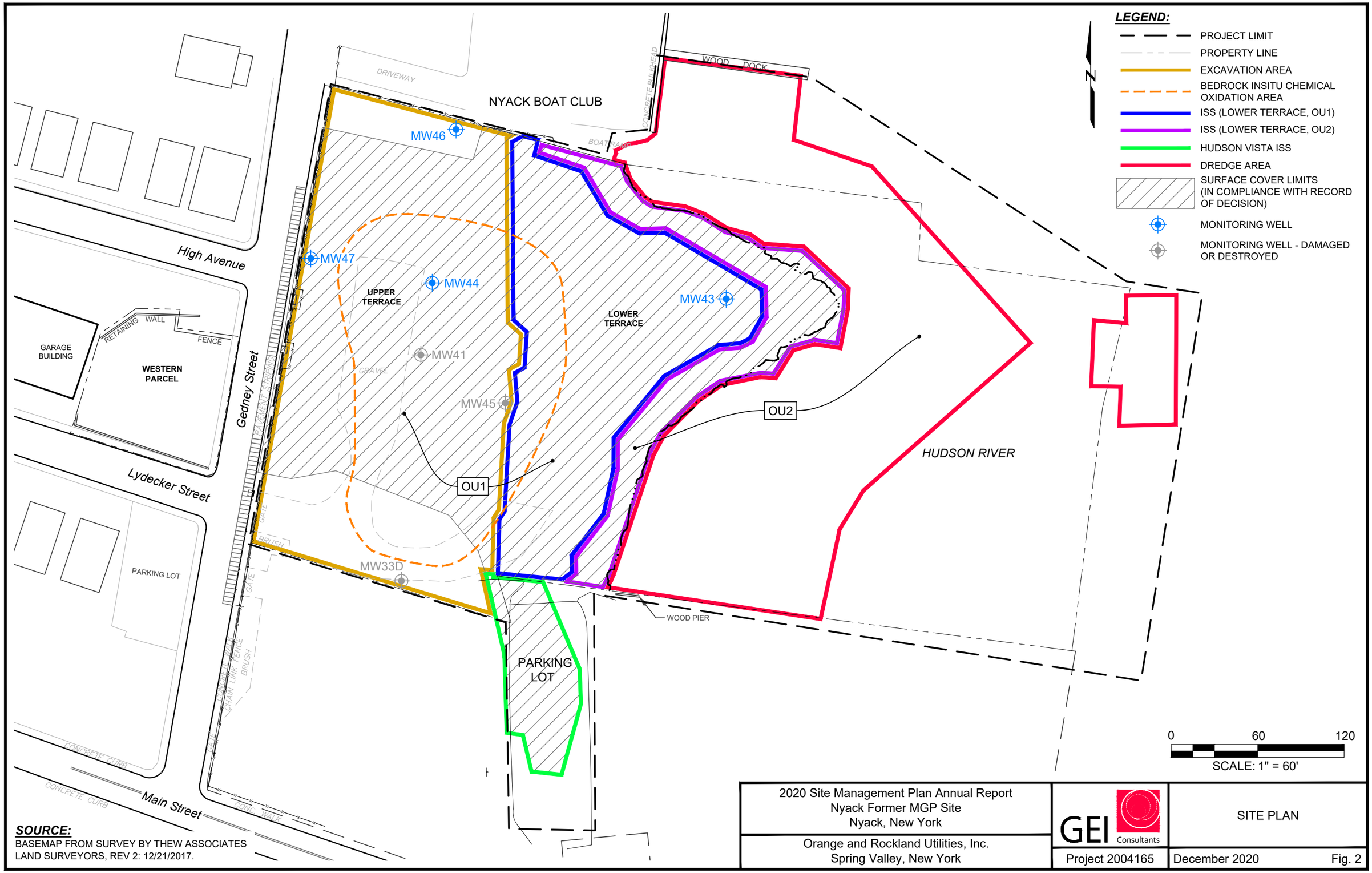


SOURCE:
U.S.G.S. TOPOGRAPHIC MAP CREATED WITH TOPO! ® ©2004
NATIONAL GEOGRAPHIC (www.nationalgeographic.com/topo)

0 2000' 4000'
SCALE: 1" = 2000'

2020 Site Management Plan Annual Report Nyack Former MGP Site Nyack, New York	GEI Consultants	SITE LOCATION MAP
Orange and Rockland Utilities, Inc. Spring Valley, New York	Project 2004165	December 2020 Fig. 1

\\GTB2L-PHERI B:\Working\O&R\2004165 Nyack MGP SMP Activities\00_CAD\Figures\2020 SMP\2004165_SMP_SLM.dwg - 12/1/2020



SOURCE:
BASEMAP FROM SURVEY BY THEW ASSOCIATES
LAND SURVEYORS, REV 2: 12/21/2017.

2020 Site Management Plan Annual Report Nyack Former MGP Site Nyack, New York	GEI Consultants	SITE PLAN
Orange and Rockland Utilities, Inc. Spring Valley, New York	Project 2004165	December 2020 Fig. 2

\\geiconsulta B:\Working\O&R\2004165 Nyack MGP SMP Activities\00_CAD\Figures\2020 SMP\2004165_SMP_FIGS.dwg - 12/1/2020

LEGEND:

- PROJECT LIMIT
- PROPERTY LINE
- MONITORING WELL
- MONITORING WELL - DAMAGED OR DESTROYED
- 11.53 GROUNDWATER ELEVATION MEASURED 10/6/2020
- INFERRED DIRECTION OF GROUNDWATER FLOW

N

NYACK BOAT CLUB

DRIVEWAY

WOOD DOCK

CONCRETE BULKHEAD

BOAT RAMP

MW46
3.89

MEAN HIGH WATER LINE

MW47
11.53

MW44
4.84

MW43
1.85

UPPER TERRACE

LOWER TERRACE

GRAVEL

MW41

MW45

HUDSON RIVER

High Avenue

GARAGE BUILDING

RETAINING WALL

FENCE

WESTERN PARCEL

Gedney Street

PAVEMENT STRIPING

GATE

BRUSH

OU1/OU2 BOUNDARY

MW33D

WOOD PIER

Lydecker Street

PARKING LOT

CONCRETE WALK

CHAIN LINK FENCE

BRUSH

GATE

GATE

PARKING LOT

CONCRETE CURB

CONCRETE CURB

Main Street

CONC. WALK

0 60 120

SCALE: 1" = 60'

SOURCE:
BASEMAP FROM SURVEY BY THEW ASSOCIATES
LAND SURVEYORS, REV 2: 12/21/2017.

2020 Site Management Plan Annual Report Nyack Former MGP Site Nyack, New York	GEI Consultants	GROUNDWATER ELEVATION SUMMARY OCTOBER 6, 2020
Orange and Rockland Utilities, Inc. Spring Valley, New York	Project 2004165	December 2020 Fig. 3

\\GTB2L-PHERI B:\Working\O&R\2004165 Nyack MGP SMP Activities\00_CAD\Figures\2020 SMP\2004165_SMP_FIGS.dwg - 12/1/2020

Sample ID:	MW46	MW46	MW46
Sampling Date:	12/2017	11/19/2018	6/25/2019
Benzene	**5,900**	**1,900**	**610**
Ethylbenzene	**650**	**310**	**110 J**
Toluene	**8.3**	ND	ND
Xylenes, Total	**790**	**230 J**	ND
Total BTEX:	**7,348**	**2,440**	**720**
Acenaphthene	**37**	**47**	**29**
Acenaphthylene	**4**	**4.5**	**2.2**
Anthracene	**5.3**	**4.5**	**3.4**
Benzo[a]anthracene	**1.3 J**	ND	ND
Chrysene	**1.1 J**	ND	ND
Fluoranthene	**3.40**	**1.9**	**2.3**
Fluorene	**16**	**18**	**11**
2-Methylnaphthalene	**100**	**120**	**22**
Naphthalene	**1,100**	**1,200**	**140**
Phenanthrene	**24**	**25**	**13**
Pyrene	**4.6**	**2.6**	**3.4**
Total PAH 17:	**1,297**	**1,423**	**226.3**

Sample ID:	MW47	MW47	MW47	MW47
Sampling Date:	12/2017	11/19/2018	6/25/2019	10/21/2020
Benzene	**410**	**360**	**49 J**	**410**
Ethylbenzene	**290**	**850**	**96**	**170**
Toluene	**390**	**360**	ND	**68**
Xylenes, Total	**540**	**1,400**	**55 J**	**220**
Total BTEX:	**1,630**	**2,970**	**200**	**868**
Acenaphthene	**47**	**1,400**	**69**	**40**
Acenaphthylene	**21**	**510**	**13**	**11**
Anthracene	**7.3**	**1,200**	**20**	**6.5**
Benzo[a]anthracene	**2.2**	**910**	**11**	**1.5 J**
Benzo[a]pyrene	**1.6 J**	**820**	**8.6**	**1.2 J**
Benzo[b]fluoranthene	**1 J**	**580**	**6.2**	ND
Benzo[g,h,i]perylene	**0.84 J**	**450**	**4.2**	ND
Benzo[k]fluoranthene	ND	**180**	**2.5**	ND
Chrysene	**1.6 J**	**790**	**9.5**	**1.2 J**
Dibenz(a,h)anthracene	ND	**86**	ND	ND
Fluoranthene	**5.7**	**1,700**	**23**	**4.4**
Fluorene	**23**	**1,300**	**30**	**22**
Indeno[1,2,3-cd]pyrene	ND	**270**	**2.8**	ND
2-Methylnaphthalene	**110**	**2,300**	**23**	**65**
Naphthalene	**2,100**	**6,700**	**140**	**580**
Phenanthrene	**36**	**4,500**	**64**	**36**
Pyrene	**7.8**	**3,000**	**43**	**6.9**
Total PAH 17:	**2,365**	**26,696**	**469.8**	**775.7**

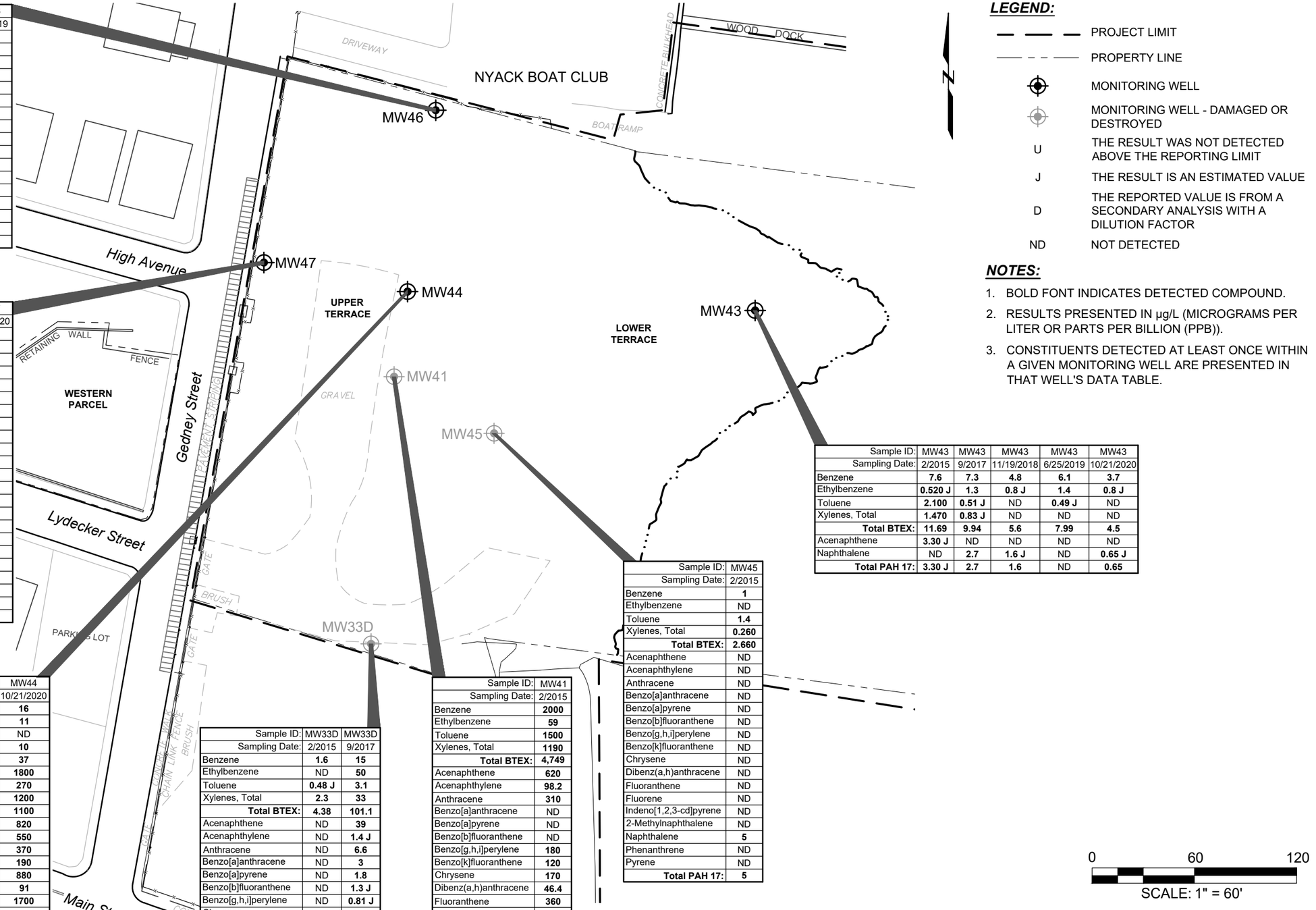
Sample ID:	MW44	MW44	MW44	MW44	MW44
Sampling Date:	2/2015	12/2017	11/19/2018	6/25/2019	10/21/2020
Benzene	**8,900**	**1,300**	**2,800**	**2,600**	**16**
Ethylbenzene	**460 J**	**790**	**1,400**	**5,500**	**11**
Toluene	**35,200**	**32**	ND	**57 J**	ND
Xylenes, Total	**36,200**	**700**	**1,400**	**4,300**	**10**
Total BTEX:	**80,760**	**2,822**	**5,600**	**12,457**	**37**
Acenaphthene	**22,400**	**130**	**220**	**12,000**	**1800**
Acenaphthylene	**5,700**	**26**	**29**	**1,600**	**270**
Anthracene	**15,100**	**69**	**91**	**8,100**	**1200**
Benzo[a]anthracene	**9,700**	**74**	**89**	**5,500**	**1100**
Benzo[a]pyrene	**10,200**	**58**	**68**	**4,300**	**820**
Benzo[b]fluoranthene	**9,300**	**44**	**53**	**3,000**	**550**
Benzo[g,h,i]perylene	**4,500**	**28**	**35**	**1,700**	**370**
Benzo[k]fluoranthene	**1,700**	**17**	**14**	**1,400**	**190**
Chrysene	**10,200**	**69**	**75**	**5,200**	**880**
Dibenz(a,h)anthracene	**1,000 J**	ND	**7.4**	ND	**91**
Fluoranthene	**16,400**	**140**	**140**	**9,800**	**1700**
Fluorene	**19,600**	**77**	**120**	**7,900**	**1200**
Indeno[1,2,3-cd]pyrene	**2,900**	**18**	**22**	**1,100**	**260**
2-Methylnaphthalene	**45,000**	**190**	**510**	**26,000**	**3800**
Naphthalene	**167,900**	**1,300**	**4,000**	**64,000**	**11000**
Phenanthrene	**42,900**	**300**	**390**	**27,000**	**4200**
Pyrene	**28,500**	**170**	**220**	**16,000**	**2600**
Total PAH 17:	**413,000**	**2,710**	**6,083**	**194,600**	**32031**

Sample ID:	MW33D	MW33D
Sampling Date:	2/2015	9/2017
Benzene	**1.6**	**15**
Ethylbenzene	ND	**50**
Toluene	**0.48 J**	**3.1**
Xylenes, Total	**2.3**	**33**
Total BTEX:	**4.38**	**101.1**
Acenaphthene	ND	**39**
Acenaphthylene	ND	**1.4 J**
Anthracene	ND	**6.6**
Benzo[a]anthracene	ND	**3**
Benzo[a]pyrene	ND	**1.8**
Benzo[b]fluoranthene	ND	**1.3 J**
Benzo[g,h,i]perylene	ND	**0.81 J**
Chrysene	ND	**2.4**
Fluoranthene	ND	**6.6**
Fluorene	ND	**13**
Naphthalene	ND	**19**
Phenanthrene	ND	**27**
Pyrene	ND	**10**
Total PAH 17:	**ND**	**132**

Sample ID:	MW41
Sampling Date:	2/2015
Benzene	**2000**
Ethylbenzene	**59**
Toluene	**1500**
Xylenes, Total	**1190**
Total BTEX:	**4,749**
Acenaphthene	**620**
Acenaphthylene	**98.2**
Anthracene	**310**
Benzo[a]anthracene	ND
Benzo[a]pyrene	ND
Benzo[b]fluoranthene	ND
Benzo[g,h,i]perylene	**180**
Benzo[k]fluoranthene	**120**
Chrysene	**170**
Dibenz(a,h)anthracene	**46.4**
Fluoranthene	**360**
Fluorene	**340**
Indeno[1,2,3-cd]pyrene	**160**
2-Methylnaphthalene	**1100**
Naphthalene	**4500**
Phenanthrene	**1000**
Pyrene	**560**
Total PAH 17:	**10,075**

Sample ID:	MW45
Sampling Date:	2/2015
Benzene	**1**
Ethylbenzene	ND
Toluene	**1.4**
Xylenes, Total	**0.260**
Total BTEX:	**2.660**
Acenaphthene	ND
Acenaphthylene	ND
Anthracene	ND
Benzo[a]anthracene	ND
Benzo[a]pyrene	ND
Benzo[b]fluoranthene	ND
Benzo[g,h,i]perylene	ND
Benzo[k]fluoranthene	ND
Chrysene	ND
Dibenz(a,h)anthracene	ND
Fluoranthene	ND
Fluorene	ND
Indeno[1,2,3-cd]pyrene	ND
2-Methylnaphthalene	ND
Naphthalene	**5**
Phenanthrene	ND
Pyrene	ND
Total PAH 17:	**5**

Sample ID:	MW43	MW43	MW43	MW43	MW43
Sampling Date:	2/2015	9/2017	11/19/2018	6/25/2019	10/21/2020
Benzene	**7.6**	**7.3**	**4.8**	**6.1**	**3.7**
Ethylbenzene	**0.520 J**	**1.3**	**0.8 J**	**1.4**	**0.8 J**
Toluene	**2.100**	**0.51 J**	ND	**0.49 J**	ND
Xylenes, Total	**1.470**	**0.83 J**	ND	ND	ND
Total BTEX:	**11.69**	**9.94**	**5.6**	**7.99**	**4.5**
Acenaphthene	**3.30 J**	ND	ND	ND	ND
Naphthalene	ND	**2.7**	**1.6 J**	ND	**0.65 J**
Total PAH 17:	**3.30 J**	**2.7**	**1.6**	ND	**0.65**



LEGEND:

- PROJECT LIMIT
- PROPERTY LINE
- MONITORING WELL
- MONITORING WELL - DAMAGED OR DESTROYED
- U — THE RESULT WAS NOT DETECTED ABOVE THE REPORTING LIMIT
- J — THE RESULT IS AN ESTIMATED VALUE
- D — THE REPORTED VALUE IS FROM A SECONDARY ANALYSIS WITH A DILUTION FACTOR
- ND — NOT DETECTED

NOTES:

1. BOLD FONT INDICATES DETECTED COMPOUND.
2. RESULTS PRESENTED IN µg/L (MICROGRAMS PER LITER OR PARTS PER BILLION (PPB)).
3. CONSTITUENTS DETECTED AT LEAST ONCE WITHIN A GIVEN MONITORING WELL ARE PRESENTED IN THAT WELL'S DATA TABLE.

2020 Site Management Plan Annual Report
Nyack Former MGP Site
Nyack, New York

Orange and Rockland Utilities, Inc.
Spring Valley, New York

GEI Consultants

Project 2004165

BASELINE AND POST-REMEDIATION GROUNDWATER QUALITY

December 2020 Fig. 4

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Appendix A

Laboratory Chain-of-Custody Record and Form I Reports

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: EVAN CHRISTIAN	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-51854-10107.1
Client Contact: Ms. Wendy Moore	Phone: 610-999-3933	E-Mail: David.Dunlap@Eurofinset.com		Page: Page 1 of 1
Company: GEI Consultants, Inc.				Job #:
Address: 1301 Trumansburg Road Suite N	Due Date Requested:			
City: Ithaca	TAT Requested (days): RGNLR TAT			
State, Zip: NY, 14850				
Phone: 607-216-8966(Tel)	PO #: Purchase Order not required			
Email: wmoore@geiconsultants.com	WO #:			
Project Name: 2004165.1.1, Nyack	Project #: 18016296			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C_LL - BTEX	8270D - PAHs & 2-methylnaphthalene	VOCs	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N			
MW43	10-21-20	11:50	G	Water			X	X			
MW44	10-21-20	13:35	G	Water			X	X			
~~MW46~~				Water							
MW47	10-21-20	10:20	G	Water			X	X			
				Water							
TRIP BLANK (10202020	~~10-19-20~~	14:30		Water					X		

180-112662 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: EVAN CHRISTIAN GEI	10-21-20	GEI		10-22-20	ETAPH
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 8:30	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

11/09/2020

Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW43
Date Collected: 10/21/20 11:50
Date Received: 10/22/20 08:30

Lab Sample ID: 180-112662-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**3.7**		1.0	0.60	ug/L			10/27/20 14:31	1
Ethylbenzene	**0.80**	**J**	1.0	0.51	ug/L			10/27/20 14:31	1
Toluene	ND		1.0	0.46	ug/L			10/27/20 14:31	1
Xylenes, Total	ND		2.0	0.89	ug/L			10/27/20 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*64 - 120*		*10/27/20 14:31*	*1*
Dibromofluoromethane (Surr)	*87*		*71 - 132*		*10/27/20 14:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 146*		*10/27/20 14:31*	*1*
Toluene-d8 (Surr)	*98*		*75 - 120*		*10/27/20 14:31*	*1*

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: MW43
Date Collected: 10/21/20 11:50
Date Received: 10/22/20 08:30

Lab Sample ID: 180-112662-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.0	0.68	ug/L		10/27/20 12:47	11/04/20 12:36	1
Acenaphthylene	ND		2.0	0.68	ug/L		10/27/20 12:47	11/04/20 12:36	1
Anthracene	ND		2.0	0.51	ug/L		10/27/20 12:47	11/04/20 12:36	1
Benzo[a]anthracene	ND		2.0	0.78	ug/L		10/27/20 12:47	11/04/20 12:36	1
Benzo[a]pyrene	ND		2.0	0.55	ug/L		10/27/20 12:47	11/04/20 12:36	1
Benzo[b]fluoranthene	ND		2.0	1.0	ug/L		10/27/20 12:47	11/04/20 12:36	1
Benzo[g,h,i]perylene	ND		2.0	0.72	ug/L		10/27/20 12:47	11/04/20 12:36	1
Benzo[k]fluoranthene	ND		2.0	0.92	ug/L		10/27/20 12:47	11/04/20 12:36	1
Chrysene	ND		2.0	0.84	ug/L		10/27/20 12:47	11/04/20 12:36	1
Dibenz(a,h)anthracene	ND		2.0	0.75	ug/L		10/27/20 12:47	11/04/20 12:36	1
Fluoranthene	ND		2.0	0.63	ug/L		10/27/20 12:47	11/04/20 12:36	1
Fluorene	ND		2.0	0.72	ug/L		10/27/20 12:47	11/04/20 12:36	1
Indeno[1,2,3-cd]pyrene	ND		2.0	0.89	ug/L		10/27/20 12:47	11/04/20 12:36	1
2-Methylnaphthalene	ND		2.0	0.65	ug/L		10/27/20 12:47	11/04/20 12:36	1
Naphthalene	**0.65**	**J**	2.0	0.61	ug/L		10/27/20 12:47	11/04/20 12:36	1
Phenanthrene	ND		2.0	0.57	ug/L		10/27/20 12:47	11/04/20 12:36	1
Pyrene	ND		2.0	0.56	ug/L		10/27/20 12:47	11/04/20 12:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*44 - 105*	*10/27/20 12:47*	*11/04/20 12:36*	*1*
Nitrobenzene-d5 (Surr)	*84*		*45 - 108*	*10/27/20 12:47*	*11/04/20 12:36*	*1*
Terphenyl-d14 (Surr)	*51*		*20 - 128*	*10/27/20 12:47*	*11/04/20 12:36*	*1*

Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW44
Date Collected: 10/21/20 13:35
Date Received: 10/22/20 08:30

Lab Sample ID: 180-112662-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**16**		1.0	0.60	ug/L			10/27/20 14:57	1
Ethylbenzene	**11**		1.0	0.51	ug/L			10/27/20 14:57	1
Toluene	ND		1.0	0.46	ug/L			10/27/20 14:57	1
Xylenes, Total	**10**		2.0	0.89	ug/L			10/27/20 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*64 - 120*		*10/27/20 14:57*	*1*
Dibromofluoromethane (Surr)	*90*		*71 - 132*		*10/27/20 14:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 146*		*10/27/20 14:57*	*1*
Toluene-d8 (Surr)	*98*		*75 - 120*		*10/27/20 14:57*	*1*

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: MW44
Date Collected: 10/21/20 13:35
Date Received: 10/22/20 08:30

Lab Sample ID: 180-112662-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1800		19	6.5	ug/L		10/27/20 12:47	11/04/20 13:04	10
Acenaphthylene	270		19	6.5	ug/L		10/27/20 12:47	11/04/20 13:04	10
Anthracene	1200		19	4.9	ug/L		10/27/20 12:47	11/04/20 13:04	10
Benzo[a]anthracene	1100		19	7.5	ug/L		10/27/20 12:47	11/04/20 13:04	10
Benzo[a]pyrene	820		19	5.3	ug/L		10/27/20 12:47	11/04/20 13:04	10
Benzo[b]fluoranthene	550		19	9.7	ug/L		10/27/20 12:47	11/04/20 13:04	10
Benzo[g,h,i]perylene	370		19	6.9	ug/L		10/27/20 12:47	11/04/20 13:04	10
Benzo[k]fluoranthene	190		19	8.8	ug/L		10/27/20 12:47	11/04/20 13:04	10
Chrysene	880		19	8.1	ug/L		10/27/20 12:47	11/04/20 13:04	10
Dibenz(a,h)anthracene	91		19	7.2	ug/L		10/27/20 12:47	11/04/20 13:04	10
Fluoranthene	1700		19	6.0	ug/L		10/27/20 12:47	11/04/20 13:04	10
Fluorene	1200		19	6.9	ug/L		10/27/20 12:47	11/04/20 13:04	10
Indeno[1,2,3-cd]pyrene	260		19	8.5	ug/L		10/27/20 12:47	11/04/20 13:04	10
2-Methylnaphthalene	3800		19	6.2	ug/L		10/27/20 12:47	11/04/20 13:04	10
Naphthalene	7700	E	19	5.9	ug/L		10/27/20 12:47	11/04/20 13:04	10
Phenanthrene	4200	E	19	5.5	ug/L		10/27/20 12:47	11/04/20 13:04	10
Pyrene	2600		19	5.4	ug/L		10/27/20 12:47	11/04/20 13:04	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*44 - 105*	*10/27/20 12:47*	*11/04/20 13:04*	*10*
Nitrobenzene-d5 (Surr)	*114*	*X*	*45 - 108*	*10/27/20 12:47*	*11/04/20 13:04*	*10*
Terphenyl-d14 (Surr)	*83*		*20 - 128*	*10/27/20 12:47*	*11/04/20 13:04*	*10*

Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW47
Date Collected: 10/21/20 10:20
Date Received: 10/22/20 08:30

Lab Sample ID: 180-112662-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**410**		10	6.0	ug/L			10/29/20 15:06	10
Ethylbenzene	**170**		10	5.1	ug/L			10/29/20 15:06	10
Toluene	**68**		10	4.6	ug/L			10/29/20 15:06	10
Xylenes, Total	**220**		20	8.9	ug/L			10/29/20 15:06	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*64 - 120*		*10/29/20 15:06*	*10*
Dibromofluoromethane (Surr)	*83*		*71 - 132*		*10/29/20 15:06*	*10*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 146*		*10/29/20 15:06*	*10*
Toluene-d8 (Surr)	*91*		*75 - 120*		*10/29/20 15:06*	*10*

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: MW47
Date Collected: 10/21/20 10:20
Date Received: 10/22/20 08:30

Lab Sample ID: 180-112662-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**40**		2.1	0.71	ug/L		10/27/20 12:47	11/04/20 11:40	1
Acenaphthylene	**11**		2.1	0.71	ug/L		10/27/20 12:47	11/04/20 11:40	1
Anthracene	**6.5**		2.1	0.53	ug/L		10/27/20 12:47	11/04/20 11:40	1
Benzo[a]anthracene	**1.5**	**J**	2.1	0.82	ug/L		10/27/20 12:47	11/04/20 11:40	1
Benzo[a]pyrene	**1.2**	**J**	2.1	0.58	ug/L		10/27/20 12:47	11/04/20 11:40	1
Benzo[b]fluoranthene	ND		2.1	1.1	ug/L		10/27/20 12:47	11/04/20 11:40	1
Benzo[g,h,i]perylene	ND		2.1	0.75	ug/L		10/27/20 12:47	11/04/20 11:40	1
Benzo[k]fluoranthene	ND		2.1	0.96	ug/L		10/27/20 12:47	11/04/20 11:40	1
Chrysene	**1.2**	**J**	2.1	0.88	ug/L		10/27/20 12:47	11/04/20 11:40	1
Dibenz(a,h)anthracene	ND		2.1	0.78	ug/L		10/27/20 12:47	11/04/20 11:40	1
Fluoranthene	**4.4**		2.1	0.65	ug/L		10/27/20 12:47	11/04/20 11:40	1
Fluorene	**22**		2.1	0.75	ug/L		10/27/20 12:47	11/04/20 11:40	1
Indeno[1,2,3-cd]pyrene	ND		2.1	0.92	ug/L		10/27/20 12:47	11/04/20 11:40	1
2-Methylnaphthalene	**65**		2.1	0.67	ug/L		10/27/20 12:47	11/04/20 11:40	1
Naphthalene	**580**	**E F1**	2.1	0.64	ug/L		10/27/20 12:47	11/04/20 11:40	1
Phenanthrene	**36**		2.1	0.60	ug/L		10/27/20 12:47	11/04/20 11:40	1
Pyrene	**6.9**		2.1	0.59	ug/L		10/27/20 12:47	11/04/20 11:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*44 - 105*	*10/27/20 12:47*	*11/04/20 11:40*	*1*
Nitrobenzene-d5 (Surr)	*78*		*45 - 108*	*10/27/20 12:47*	*11/04/20 11:40*	*1*
Terphenyl-d14 (Surr)	*95*		*20 - 128*	*10/27/20 12:47*	*11/04/20 11:40*	*1*

Appendix B

Surface Cover Inspection Report (including Photographic Record)

SITE INSPECTION FORM

Nyack Former Manufactured Gas Plant Site

SITE INSPECTION DATE: 10/6/2020 **TIME OF ARRIVAL**: 7:10 a.m.

DEPARTURE: 8:25 a.m.

WEATHER: Mostly clear with fog early on; low 50s °F.

Orange and Rockland Representative(s): None

INSPECTION TYPE: **Annual Inspection** or **Emergency Inspection**

(if emergency indicate event that required an inspection): Annual SMP Inspection for 2020

Engineering controls – cover and site utilities.

Are the Institutional Controls in place, performing properly, and remain effective?

Yes

Does the Site comply with NYSDEC-approved Site Management Plan? Yes

Has ownership of the property changed since the last inspection? No

(Verify with Real Estate and Survey Departments)

Owner continues to be TZ Vista.

Are there any changes to intended site use (Restricted Residential, Commercial Or Industrial) which would affect the SMP or institutional controls? Yes

The site is planned to be developed by TZ Vista. It is GEI's understanding that development will be for commercial and residential use. The status for project approval is unknown. The schedule for development is unknown.

Is site used for agricultural purpose or vegetable gardens? Yes / (No)

SITE INSPECTION FORM

Nyack Former Manufactured Gas Plant Site

Is groundwater used as source of potable or process water onsite Yes / (No)

If yes to the above – does water go through the necessary water quality treatment? N/A

Is solidified material visible, or is there any evidence of damage to solidified soil from frost and wave action? Yes / (No)

Not visible during low tide at 7:16 a.m. (Tarrytown NOAA station)

Are the Engineering Controls in place, performing properly, and remain effective?

Surface Cover Intact (i.e. no evidence of erosion, excavations), including concrete sidewalk and paved street west of the site? (Yes)/ No

GENERAL SITE OBSERVATIONS:

Have there been any changes to the property since the last inspection? (i.e. new equipment, residential buildings or facilities, changes in site topography, erosion, etc.) Yes / (No)

There does not appear to have been any construction activities although equipment remains onsite (as shown in the attached photos). It appears that mowing of the site has not been performed in 2020. Minor erosion was observed at the drain outfall pipe at the southeast corner of the site at the north end of the Hudson Vista parking lot (photo is included in attached photo log).

NOTE:

Inspections should be made a minimum once a year and within 5 days of an emergency, such as a natural disaster or an unforeseen failure or damage to the building occurs. Inspections will be conducted by Consolidated Edison (or their agent) and results reported to NYSDEC.

COMPLETED BY: Sean DiBartolo, P.E.	**SIGNATURE:** Sean DiBartolo
GEI Consultants, Inc. P.C.	

GEI Consultants

PHOTOGRAPHIC RECORD

Company: Orange and Rockland Utilities, Inc.
Project: 2020 SMP Inspection, Nyack Former MGP Site

Photo No.: 1
Photographer: S. DiBartolo
Date: 10/6/2020
Direction: North

Comments:
Upper Terrace

Photo No.: 2
Photographer: E. Christian
Date: 10/2/2020
Direction: Northwest

Comments:
Upper Terrace

GEI Consultants

PHOTOGRAPHIC RECORD

Company: Orange and Rockland Utilities, Inc.
Project: 2020 SMP Inspection, Nyack Former MGP Site

Photo No.: 3
Photographer: E. Christian
Date: 10/2/2020
Direction: East

Comments:
Upper Terrace

GEI Consultants

PHOTOGRAPHIC RECORD

Company: Orange and Rockland Utilities, Inc.
Project: 2020 SMP Inspection, Nyack Former MGP Site

Photo No.: 4
Photographer: S. DiBartolo
Date: 10/6/2020
Direction: East

Comments:
Lower Terrace and Hudson River Area

Photo No.: 5
Photographer: S. DiBartolo
Date: 10/6/2020
Direction: North

Comments:
Lower Terrace

GEI Consultants

PHOTOGRAPHIC RECORD

Company: Orange and Rockland Utilities, Inc.
Project: 2020 SMP Inspection, Nyack Former MGP Site

Photo No.: 6
Photographer: S. DiBartolo
Date: 10/6/2020
Direction: Southwest

Comments:
Lower Terrace

Photo No.: 7
Photographer: S. DiBartolo
Date: 10/6/2020
Direction: South

Comments:
Lower Terrace towards
Hudson Vista Parking Lot

GEI Consultants

PHOTOGRAPHIC RECORD

Company: Orange and Rockland Utilities, Inc.
Project: 2020 SMP Inspection, Nyack Former MGP Site

Photo No.: 8
Photographer: S. DiBartolo
Date: 10/6/2020
Direction: North

Comments:
Hudson Vista Associates Parcel lower parking lot portion of surface cover

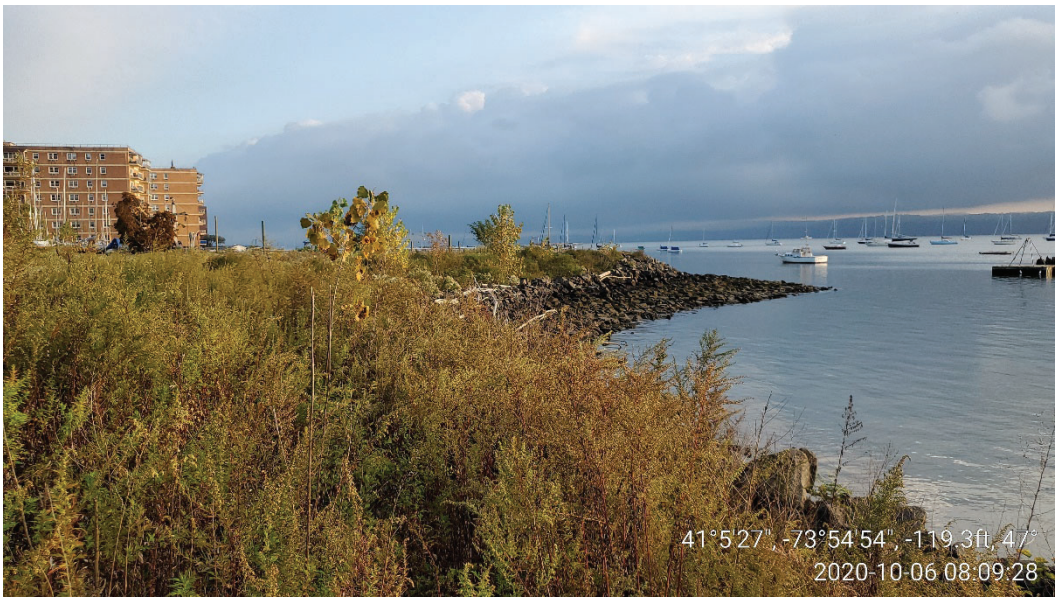

Photo No.: 9
Photographer: S. DiBartolo
Date: 10/6/2020
Direction: Northeast

Comments:
Lower Terrace and Riprap Slope

GEI Consultants

PHOTOGRAPHIC RECORD

Company: Orange and Rockland Utilities, Inc.
Project: 2020 SMP Inspection, Nyack Former MGP Site

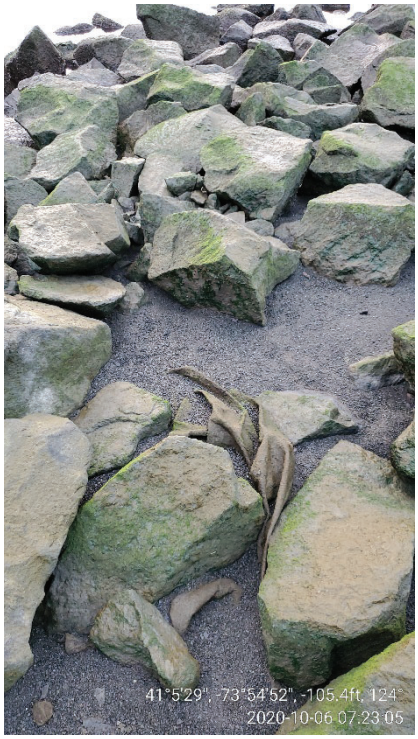

Photo No.: 10
Photographer: S. DiBartolo
Date: 10/6/2020
Direction: Southeast

Comments:
Riprap Slope at Hudson River at Low Tide

Photo No.: 11
Photographer: S. DiBartolo
Date: 10/6/2020
Direction: Southwest

Comments:
Riprap Slope at Hudson River at Low Tide

GEI Consultants

PHOTOGRAPHIC RECORD

Company: Orange and Rockland Utilities, Inc.
Project: 2020 SMP Inspection, Nyack Former MGP Site

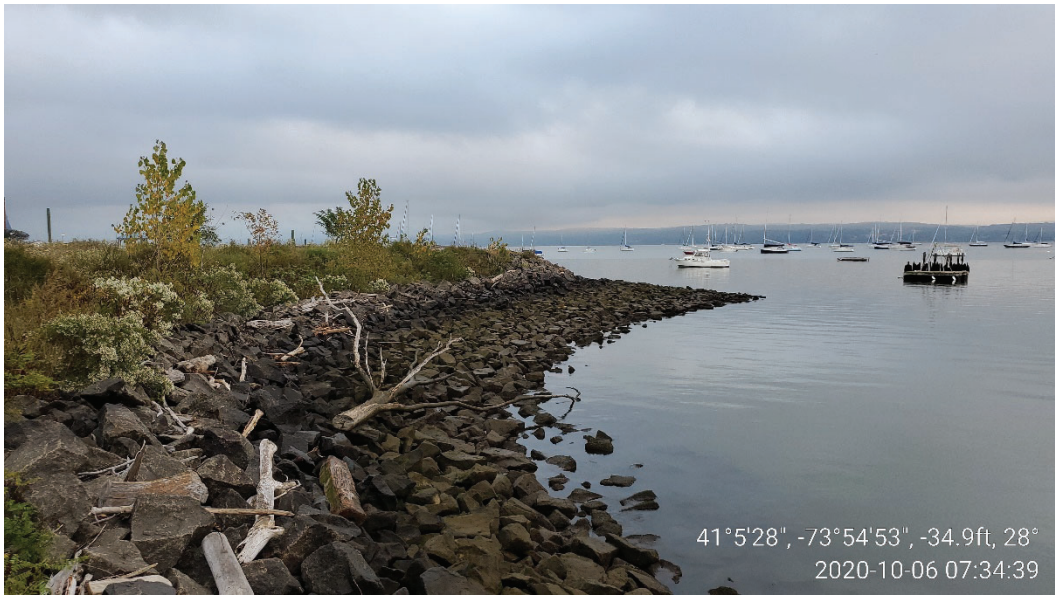

Photo No.: 12
Photographer: S. DiBartolo
Date: 10/6/2020
Direction: Northeast

Comments:
Riprap Slope at Hudson River at Low Tide

Photo No.: 13
Photographer: S. DiBartolo
Date: 10/6/2020
Direction: Northwest

Comments:
Stormwater CMP Outfall at North end of Hudson Vista Parking Lot

Company: Orange and Rockland Utilities, Inc.
Project: 2020 SMP Inspection, Nyack Former MGP Site

Photo No.: 14
Photographer: S. DiBartolo
Date: 10/6/2020
Direction: South

Comments:
Perimeter fence at Gedney Street

Photo No.: 15
Photographer: S. DiBartolo
Date: 10/6/2020
Direction: Northeast

Comments:
Perimeter fence at Gedney Street

GEI Consultants

PHOTOGRAPHIC RECORD

Company: Orange and Rockland Utilities, Inc.
Project: 2020 SMP Inspection, Nyack Former MGP Site

Photo No.: 16
Photographer: S. DiBartolo
Date: 10/6/2020
Direction: Southwest

Comments:

Perimeter fence at Main Street (upper left side of photo) and Gedney Street (upper right side of photo)