

**PERIODIC REVIEW REPORT FOR PERIOD ENDING 12 DECEMBER 2022**  
**TARRYTOWN FORMER MGP SITE**  
**BROWNFIELD CLEANUP AGREEMENT NO. C3600064**  
**TARRYTOWN, NEW YORK**

by  
Haley & Aldrich of New York  
237 West 35<sup>th</sup> Street  
16<sup>th</sup> Floor  
New York, New York

for  
New York State Department of Environmental Conservation  
Albany, New York

File No. 134976-002  
December 2022





Haley & Aldrich of New York  
200 Town Centre Drive  
Suite 2  
Rochester, NY 14623  
585.359.9000

21 December 2022  
File No. 134976-002

New York State Department of Environmental Conservation  
Division of Environmental Remediation  
625 Broadway, 11<sup>th</sup> Floor  
Albany, New York 12233-7014

Attention: Michael Squire  
Project Manager

Subject: Tarrytown Former MGP Site  
Periodic Review Report Period Ending 12 December 2022  
Brownfield Cleanup Agreement No. C3600064

Ladies and Gentlemen:

On behalf of Ferry Landings, LLC, Haley & Aldrich has prepared this Site Management Periodic Review Report (PRR) for the period ending 12 December 2022. During the period for this PRR, the revised *Site Management Plan - Tarrytown Former MGP Site, Tarrytown, NY*, dated August 2010 and accepted by the NYSDEC on 26 August 2010, was in force.

Based on ongoing site monitoring data and inspections, the remedial action continues to perform and is effective.

Sincerely yours,  
HALEY & ALDRICH OF NEW YORK

Scott A. Underhill, P.E.  
Principal Consultant

James M. Bellew  
Principal

Mari C. Conlon, P.G.  
Associate

Enclosures

C: NYSDEC; Attn: Amen Omorogbe  
Ferry Landings, LLC, Attn: Carl Monheit  
Con Edison: Attn: Yelena Skorobogatov

\\haleyaldrich.com\share\roc\_common\Projects\28590 Hudson Harbor - National Resources\122x 2022 Services\2. PRR\2022\_1221\_HANY\_PRR Summ Rpt-D2.docx

## Executive Summary

This Site Management Periodic Review Report (PRR) for the period of 30 November 2022 through 12 December 2022 was prepared by Haley & Aldrich of New York on behalf of Ferry Landings, LLC. During the period covered by this PRR, the revised “Site Management Plan Tarrytown Former MGP Site, Tarrytown, NY,” dated August 2010 and accepted by the NYSDEC on 26 August 2010 (the SMP), was in force.

This PRR provides a summary of the pre-remediation and post-remediation site conditions, and provides a synopsis of site activities conducted under the SMP during the reporting period, as follows:

- Based on monitoring events results and inspection performed during this and prior reporting periods, the remedial action remains functional and is effective as required by the SMP. Site monitoring and inspections should continue through the next PRR period per the SMP and the frequency for groundwater monitoring, underwater cap inspection, and DNAPL recovery events as recommended in the 2020 to 2021 period PRR, which was approved by NYSDEC on 07 January 2021.
- Engineering Controls and Institutional Controls for the site are in place and effective.

The current annual schedule for submitting the PRR itself is satisfactory. The next PRR required to be submitted to NYSDEC, covering the year between 12 December 2022 and 30 November 2023, will be submitted following the closure of that period, and within the time frame required.

During the reporting period, the DNAPL system was monitored and DNAPL extracted on March 30, 2022; June 29, 2022; and on December 12, 2022. The annual site inspection was conducted on 12 December 2022.

# Table of Contents

	Page
<b>Executive Summary</b>	<b>i</b>
<b>List of Figures</b>	<b>iii</b>
<b>1. Overview</b>	<b>1</b>
<b>2. Introduction</b>	<b>2</b>
2.1 SUMMARY OF SITE, NATURE OF CONTAMINATION AND REMEDIAL ACTIONS	2
2.1.1 Site	2
2.1.2 Nature of Contamination	3
2.1.3 Remedial Actions	4
2.2 EFFECTIVENESS OF THE REMEDIAL PROGRAM	6
2.3 COMPLIANCE	6
2.4 RECOMMENDATIONS	6
<b>3. Site Overview</b>	<b>7</b>
3.1 SITE LOCATION AND SIGNIFICANT FEATURES	7
3.2 CHRONOLOGY, CLEANUP GOALS, AND MAIN FEATURES OF THE REMEDIAL PROGRAMS	7
3.3 SITE ACTIVITIES DURING THE REPORTING PERIOD	7
<b>4. Remedy Performance, Effectiveness, and Protectiveness</b>	<b>8</b>
<b>5. Institutional Controls/Engineering Controls Plan Compliance Report</b>	<b>9</b>
5.1 INSTITUTIONAL CONTROLS/ENGINEERING CONTROLS REQUIREMENTS AND COMPLIANCE	9
5.2 INSTITUTIONAL CONTROLS/ENGINEERING CONTROLS CERTIFICATION	9
5.3 COVER DISTURBANCE	9
<b>6. Monitoring Plan Compliance Report</b>	<b>10</b>
6.1 COMPONENTS OF THE MONITORING PLAN	10
6.2 SUMMARY OF MONITORING	10
6.3 COMPARISON WITH REMEDIAL OBJECTIVES	10
6.3.1 Groundwater	10
6.3.2 DNAPL	12
6.3.3 Underwater Cap	13
6.3.4 Indoor Air Quality and Sub-slab Vapor Sampling	13
6.3.5 VIMS	13
6.3.6 Soil Management	13
6.3.7 Site Inspection	13
6.4 MONITORING DEFICIENCIES	13
6.5 CONCLUSIONS AND RECOMMENDATIONS FOR CHANGES	13

## Table of Contents

	Page
<b>7. Operation and Maintenance Plan Compliance Report</b>	<b>14</b>
<b>8. Overall PRR Conclusions and Recommendations</b>	<b>15</b>
8.1 COMPLIANCE WITH THE SMP	15
8.2 PERFORMANCE AND EFFECTIVENESS OF THE REMEDY	15
8.3 FUTURE PRR SUBMITTALS	15
<b>9. Commentary for the Periodic Review Report Form</b>	<b>16</b>
9.1 BOX 1 SITE DETAILS	16
9.2 BOX 2	16
9.3 BOX 2A	16
9.4 BOX 3 DESCRIPTION OF INSTITUTIONAL CONTROLS	16
9.5 BOX 4 DESCRIPTION OF ENGINEERING CONTROLS.	16
9.6 ENGINEERING CONTROL – COVER SYSTEM	16
9.7 ENGINEERING CONTROL – VAPOR MITIGATION	16
9.8 ENGINEERING CONTROL – “LEACHATE COLLECTION”	17
9.9 BOX 5 PERIODIC REVIEW REPORT (PRR) CERTIFICATION STATEMENTS	17
9.10 BOXES 6 AND 7 IC/EC CERTIFICATIONS	17

## Figures

**Appendix A** – Periodic Review Report Form

**Appendix B** – NYSDEC Correspondence

**Appendix C** – Annual Site Inspection Form

**Appendix D** – DNAPL Monitoring and Extraction Summary

## List of Figures

Figure No.	Title
1	Site Locus
2	Site Plan - Remedial Work and Historical Extent of Residual Contaminants
3	Site Cover Plan 2021

## 1. Overview

This Periodic Review Summary Report (PRR) for the Tarrytown Former Manufactured Gas Plant (MGP) Site is for the period 30 November 2021 through 12 December 2022. The Periodic Review Report Form for this period is provided in Appendix A. This report provides:

- Summary of the site and nature of contamination prior to remedial actions;
- Summary of the remedial actions completed;
- Description of the ongoing operations, maintenance, and monitoring;
- Description of site activities during the reporting period;
- Statements regarding satisfactory compliance with the SMP and recommendations for continued future monitoring of site remedy elements; and,
- Comments about the information entered on the PRR form.

## 2. Introduction

This section presents a brief summary of site history, past and current conditions, remedial actions, and post-remediation operations, maintenance, and monitoring based on the following reports prepared by Haley & Aldrich of New York (Haley & Aldrich):

- Final Engineering Report Tarrytown Former MGP Site, Tarrytown, NY, 2005.
- Final Engineering Report Addendum Tarrytown Former MGP Site, Tarrytown, NY, 2006.
- Site Management Plan Tarrytown Former MGP Site, Westchester County, NY, August 2010 (Approved by NYSDEC 26 August 2010).
- Periodic Review Report Tarrytown Former MGP site, 31 August 2011.
- Periodic Review Report Tarrytown Former MGP site, 31 August 2014.
- Periodic Review Report Tarrytown Former MGP site, 31 August 2015.
- Periodic Review Report Tarrytown Former MGP site, 27 October 2016.
- Periodic Review Report Tarrytown Former MGP site, 27 November 2017.
- Periodic Review Report Tarrytown Former MGP site, 14 December 2018.
- Periodic Review Report Tarrytown Former MGP site, 15 January 2020<sup>1</sup>.
- Periodic Review Report Tarrytown Former MGP site, 23 December 2020<sup>2</sup>.
- Periodic Review Report Tarrytown Former MGP site, 21 December 2021.

### 2.1 SUMMARY OF SITE, NATURE OF CONTAMINATION AND REMEDIAL ACTIONS

#### 2.1.1 Site

A site locus showing the project location is provided as Figure 1 and site details (historic and current) are shown on plans provided in Figures 2 and 3. The site is located on the east side of the Hudson River north of the Governor Mario M. Cuomo (Tappan Zee) Bridge in the Village of Tarrytown, New York. The site is bound by Division and River Streets on the north, Railroad Avenue to the east, West Main Street on the south, and the Hudson River to the west. The site encompasses approximately 20 acres and was primarily used for industrial-commercial purposes prior to remediation. Remediation was performed between June 2004 and January 2005.

Prior to remediation, an asphalt plant was in the northwest portion of the site and a truck terminal and maintenance facility was located in the southeast portion of the site. The central portion of the site included a former manufactured gas plant (MGP), reportedly operated between 1873 and 1938. The MGP was last operated by the Westchester Lighting Company, which was succeeded in ownership by Con Edison.

---

<sup>1</sup> Note that this PRR report was for reporting period ending 30 November 2019 and the final PRR report was dated January 2020.

<sup>2</sup> Note that the PRR reporting periods have tracked the timeframes required by the NYSDEC in its tracking system and annual PRR reminder notice letters. Accordingly, each PRR may cover a different period of time from the prior PRR reporting period.

### 2.1.2 Nature of Contamination

This section presents a summary of the nature of contamination and objectives of the remedial actions performed for the contamination by area of interest, organized according to four areas of the site (Figure 2):

- Former Holder and Tar Well Area;
- Former Light Non-Aqueous Phase Liquid (LNAPL) Area;
- Northern Dense Non-Aqueous Phase Liquid (DNAPL) Area; and,
- Western DNAPL and Former River Sediment Area.

Remedial actions for these areas are described in Section 2.1.3.

#### 2.1.2.1 Former Holder and Tar Well Area

During site investigations in 2003, some flowing MGP DNAPL was present in Holders A, B, and C, but not in Holder D. Soils in the “Tar Well Area”, located south of Holder A, contained zones with MGP DNAPL.

#### 2.1.2.2 Former LNAPL Area

Measurements in 1998 and 1999 by Handex Group, Inc. identified a zone of free floating LNAPL (primarily diesel fuel) in an approximately triangular-shaped area defined by MW-2, MW-3, and MW-6. Additionally, residual contamination, due to historic LNAPL releases, was evident between the free-floating LNAPL and West Main Street. Investigations in 2003 confirmed previous data regarding residual contamination in that area. No petroleum-related contamination was observed in the top four feet of soil in this area.

#### 2.1.2.3 Northern DNAPL Area

The Northern DNAPL Area is located in the north-central portion of the site, partially underneath an existing office building (former County Asphalt office) and was observed at the time to be about 500 ft long (east-west) and 200 ft wide (north-south). The primary affected media in this area was observed to be soil containing discrete zones of MGP DNAPL (apparently derived from coal tar), as observed during site investigation prior to remediation. The subject zones are located 12 to 15 ft bgs on the west side of the building and 9 to 13 ft bgs on the east side. The zone was observed during site investigations to be at the bottom of a layer of fill and exhibits limited penetration into the underlying natural soil.

#### 2.1.2.4 Western DNAPL and Former River Sediment Area

Western DNAPL and Former River Sediment Area is located in the west-central portion of the site. The Western DNAPL Area was observed at the time to be about 240 feet long (east-west) by 40 ft wide (north-south). The primary affected media in this area was observed to be soil containing discrete zones of DNAPL (apparently derived from coal tar). These soils are located 22 to 26 feet bgs. The zone was observed during site investigations to be at the bottom of the fill and exhibits limited penetration into the underlying natural soil. DNAPL-contaminated river sediment was also identified prior to remediation west of the Western DNAPL Area within the adjacent portion of the Hudson River. Contamination extended about 160 ft along the existing sea wall, and outward into the river varying

distances, up to about 120 ft. DNAPL contamination in the form of blebs and heavy sheens was also identified in river borings. The depth of the observed DNAPL ranged from one foot up to 8 feet below the top of sediment.

### **2.1.3 Remedial Actions**

The following is a summary of the Remedial Actions performed at the site.

#### *2.1.3.1 Former Holder and Tar Well Area*

The remediation consisted of removing the contents, walls and floor of three former MGP holders and excavation of contaminated soils adjacent to the holders, including an area believed to be associated with the former MGP tar wells. Contaminated soil and debris were taken off site to a permitted facility for disposal and the excavations were backfilled with a combination of on-site and imported fill meeting quality standards established for the project.

#### *2.1.3.2 Former LNAPL Area*

The remediation consisted of two parts, excavation of contaminated soil and installation of a recovery trench and skimmer system for residual floating petroleum product. Contaminated soil was taken off site to a permitted facility for disposal and the excavation was backfilled with a combination of on-site and imported fill meeting quality standards established for the project. The LNAPL recovery system was operated April 2005 through September 2007. The monitoring results through August 2007 supported a request to NYSDEC for approval to discontinue operation and to dismantle the system. In response, the NYSDEC agreed with the recommendation to discontinue operation of the LNAPL recovery system in its letter dated 10 September 2007. The system was subsequently dismantled.

#### *2.1.3.3 Northern DNAPL Area*

The remediation consisted of installing a 360-foot long sheet pile barrier extending from about 3 feet below the ground surface, downward through the fill soils into the native clayey soils to a depth of about 22 feet bgs. The barrier prevents westward migration of residual DNAPL contained in a two to three-foot-thick zone generally found at the bottom of fill (9 to 15 feet bgs). Underlying clay soils impede downward migration of the DNAPL. The Northern DNAPL recovery trench is 360-ft long, located adjacent to the sheet pile barrier, and contains six DNAPL recovery wells. An observation well is located near each end of the recovery trench.

During remediation, contaminated soil at the south end of the barrier was excavated and taken off site for disposal. The excavation was backfilled with a combination of on-site and imported fill meeting quality standards established for the project.

The recovery trench allows removal of DNAPL to the extent it accumulates on the east (upgradient) side of the barrier.

As reported in the 2017 PRR, in conjunction with the construction of the Lighthouse Building and Garage, two of the six recovery wells (RW-4N and RW-5N) were closed per an NYSDEC approval letter dated 17 May 2017. Since the system began operation in 2005, DNAPL had not been observed in either well.

In addition, the well head for RW-6N was modified by adding lateral riser piping connected to a new offset well head located outside the Lighthouse Building perimeter to facilitate future extraction operations.

#### *2.1.3.4 Western DNAPL and Former River Sediment Area*

The remediation consisted of installing a 160-foot long sheet pile barrier extending from the river bottom at the face of the relieving platform down to bedrock. The barrier prevents westward migration of residual DNAPL contained in a two to three-foot-thick zone generally found at the bottom of fill (22 to 26 feet bgs).

The Western DNAPL recovery trench is 60-ft long, about 26 to 28 feet deep, is situated about 65 feet inland (east) from the sheet pile barrier and contains two DNAPL recovery wells (RW-1 and RW-2). An observation well is located near each end of the recovery trench.

The Former River Sediment Area included the area beneath the relieving platform (about 160 feet by 20 feet by 4 feet deep) and an area of the river bottom along the sheet pile barrier and extending into the river, with a maximum extent of about 120 ft. Sediment was removed to depths ranging from about 3 to 8 feet below the river bottom.

Containment of residual DNAPL was completed with the construction of a 4-foot thick, 20-foot wide underwater cap over the sediments found under the relieving platform. The underwater cap is located between the steel sheet pile barrier at the western side of the relieving platform and the timber retaining wall at the eastern side of the relieving platform.

#### *2.1.3.5 Cover System*

A clean soil cover was placed in areas that are not beneath structures, roads, paved walks, etc. The clean soil cover is a minimum two feet thick and was placed over a demarcation layer, consisting of an orange geotextile, or equivalent. The cover system was completed in December 2006. NYSDEC's 9 January 2007 letter stated that NYSDEC had performed a site inspection on 28 December 2006 and found that "the clean soil cover was installed as required in the approved Work Plan." The cover system was disturbed between January 2010 and August 2014 for site development; cover was restored with the development by a new combination of cover elements (i.e., in places soil cover was replaced by new building and/or pavement and otherwise restored by replacement of the demarcation layer, soil cover and landscaping that meets cover thickness and material criteria). The cover system remained in place except for the minor cover disturbances for development activities between August 2014 and March 2016 and between April 2017 and July 2017. Those cover disturbances were restored as reported to NYSDEC in previous PRR Summary Reports.

During the current reporting period, the cover was not disturbed to the extent underlying soils were exposed – see Section 3 of this report for more information.

#### *2.1.3.6 Sub-Slab Soil Vapor Intrusion Management Systems*

Per the SMP, new buildings have been and will be constructed with passive sub-slab soil vapor intrusion management systems (VIMS) which are designed to be converted to active systems, if required by the NYSDEC or NYSDOH. Refer to Sections 6.3.4 and 6.3.5 for the summary of VIMS activities performed.

### **2.2 EFFECTIVENESS OF THE REMEDIAL PROGRAM**

The remedial action, with the exception of periodically required replacement of site cover following construction activities, was completed in January 2005. Site cover placement was originally completed in October 2006. The 2005 Final Engineering Report and 2006 Final Engineering Report Addendum concluded that the remedial actions were performed in accordance with the Work Plans (and approved deviations). The Final Engineering Report was accepted by NYSDEC in its letter dated 25 May 2005 and the Final Engineering Report Addendum was accepted by NYSDEC in its letter dated 09 January 2007.

### **2.3 COMPLIANCE**

The engineering controls are in place and effective.

### **2.4 RECOMMENDATIONS**

The use of the SMP and Periodic Review Reports should continue. The SMP was revised during 2010; the August 2010 Revised SMP was accepted by the NYSDEC on 26 August 2010 and remains applicable to the site during the next reporting period. The next PRR reporting period will be 12 December 2022 through 30 November 2023.

### **3. Site Overview**

#### **3.1 SITE LOCATION AND SIGNIFICANT FEATURES**

Refer to Section 2.1, above.

#### **3.2 CHRONOLOGY, CLEANUP GOALS, AND MAIN FEATURES OF THE REMEDIAL PROGRAMS**

For chronology of the remedial program, refer to Section 2.1, above. In terms of cleanup goals, as given in the August 2010 SMP, the criteria for soil to remain on site and be re-used (if excavated) below site cover are:

- Total benzene, toluene, ethylbenzene, and xylenes (BTEX) less than 10 ppm, and
- Total polycyclic aromatic hydrocarbons (PAHs) less than 500 ppm.

Criteria for clean soil cover are presented in 6 NYCRR Part 375 Table 367-6.8(b) for Restricted Residential use.

The main features of the remedial program are provided in Section 2.1, above. The only change to the site remedy since the remedy was selected in the approved Work Plans is the closure of the LNAPL recovery system. Refer to Section 2.1.3, above.

#### **3.3 SITE ACTIVITIES DURING THE REPORTING PERIOD**

During the reporting period, the DNAPL system was monitored and operated. Further details are summarized in Section 6.3.2. Annual site inspection was conducted on 12 December 2022.

## 4. Remedy Performance, Effectiveness, and Protectiveness

The remedy performance and effectiveness has been previously reported to NYSDEC in annual reports and Periodic Review Reports. The most recent prior PRR was for the Period Ending 30 November 2021. During the current reporting period, the remedy continued to perform effectively and be protective of human health and the environment. A synopsis of the remedy performance follows:

- The LNAPL system successfully removed practically-recoverable floating product. The system was dismantled, following NYSDEC approval on 10 September 2007.
- The DNAPL recovery systems continue to operate as intended. Thickness of DNAPL in the recovery wells continues to be monitored and recovery is ongoing. The thickness of DNAPL in recovery wells continued to decrease through the monitoring period, as described in Section 6.
- The underwater cap in the Hudson River was inspected in December 2019. The condition of the cap was satisfactory. Cap integrity has remained stable over the last ~15 years and three intervals of inspection.

Sub-slab Vapor Intrusion Management Systems (VIMS) are in place and functional, as reported in previous PRRs. The site VIMS may be summarized as follows:

- Lookout Building South – one VIMS with seven risers for the entire building.
- Lookout Building North – a separate VIMS for each of two ground floor residential units, and one VIMS with nine risers for the garage space occupying the rest of the ground floor.
- Carriage Houses South – a separate VIMS for each of 14 residential units.
- Carriage Houses North – a separate VIMS for each of 13 residential units.
- Clubhouse – one VIMS with four risers for the entire building.
- Lighthouse Building and Garage – a separate VIMS for each of 9 ground-level residential units and one VIMS with six risers for the area encompassed by the Garage and lobby of the Lighthouse Building.

VIMS post-installation testing (i.e., indoor air quality and sub-slab soil vapor sampling) was completed during prior reporting periods. The results were submitted to NYSDEC and NYSDOH.

## **5. Institutional Controls/Engineering Controls Plan Compliance Report**

### **5.1 INSTITUTIONAL CONTROLS/ENGINEERING CONTROLS REQUIREMENTS AND COMPLIANCE**

The ICs and ECs are listed and described in tabular format in Box 3 and Box 4 of the attached Institutional and Engineering Controls Certification Form (Appendix A).

### **5.2 INSTITUTIONAL CONTROLS/ENGINEERING CONTROLS CERTIFICATION**

Based on the data collected, the remedial actions are effective. Please refer to Section 6 for additional details.

### **5.3 COVER DISTURBANCE**

NYSDEC will be notified of future construction which disturbs the site cover per the SMP.

## 6. Monitoring Plan Compliance Report

### 6.1 COMPONENTS OF THE MONITORING PLAN

Monitoring requirements under the SMP and NYSDEC-approved modifications include:

- Groundwater monitoring at intervals of every 3 years.
- Monitoring of DNAPL observation and recovery wells during DNAPL extraction events, currently at a frequency of 3 events a year.
- Inspection of the underwater cap at intervals of every 7 years.
- Annual site inspection.

The previous list incorporates modifications to the frequency for groundwater monitoring, underwater cap inspection, and DNAPL recovery events which were recommended in the PRR for the period ending 30 November 2020, which was approved by NYSDEC on 7 January 2021 (see Appendix B for pertinent correspondence).

### 6.2 SUMMARY OF MONITORING

Monitoring was performed per the SMP during the reporting period, as described below.

### 6.3 COMPARISON WITH REMEDIAL OBJECTIVES

#### 6.3.1 Groundwater

Groundwater monitoring was performed in 2018 and 2020 in accordance with the previously implemented bi-annual schedule. The current frequency monitoring schedule would require the next round of groundwater monitoring to take place in 2023.

Results of the most recent groundwater monitoring are presented in the report: *Tarrytown Former MGP Site Post-Remediation Groundwater Monitoring 2020 Data Tarrytown, Site No. C360069 Brownfield Cleanup*, 15 December 2020. The report concluded that results over the period of monitoring were consistent with past monitoring, and the comparison of down-gradient versus up-gradient water quality also remained consistent, indicating the remedy continues to be effective. A summary of the report follows.

##### 6.3.1.1 MW-29 (up-gradient)

Iron and manganese concentrations were greater than the comparison criteria; however, these concentrations were consistent with previous results. No volatile organic compound (VOC) or polycyclic aromatic hydrocarbon (PAH) compounds were detected at concentrations greater than the comparison criteria.

##### 6.3.1.2 MW-12 (up-gradient)

Iron concentration was greater than the comparison criteria; however, the concentration was consistent with previous results. Manganese was detected at a concentration less than the comparison criterion.

No VOC compounds were detected. Seven PAH compounds were detected at concentrations greater than the comparison criteria; these PAH concentrations were consistent with previous results.

#### *6.3.1.3 MW-20 (down-gradient)*

No VOC compounds were detected. Iron and manganese concentrations and six PAH compounds were detected greater than the comparison criteria; however, the concentration was consistent with previous results. Additionally, note that in comparison to upgradient well MW-12, these PAH compounds were also detected at the upgradient well. One PAH compound (Acenaphthene) was detected but at a concentration less than the comparison criteria.

#### *6.3.1.4 MW-21 (down-gradient)*

Iron and manganese were detected at concentrations greater than the comparison criterion; however, the concentrations are consistent with previous results. No VOC compounds were detected at concentrations greater than the comparison criteria. One PAH compound (Benz(a)anthracene) concentration was detected at a concentration greater than the comparison criteria; however, the PAH concentration was consistent with previous results. Three other PAH compounds were detected at a concentration less than the comparison criteria.

#### *6.3.1.5 MW-24 (down-gradient)*

Iron and manganese were detected at a concentration slightly greater than the comparison criteria; their concentrations are consistent with previous results. No VOCs compounds were detected at concentrations greater than the comparison criteria, which is consistent with previous results. Six PAH compounds were detected at concentrations greater than the comparison criteria, however, note that in comparison to upgradient well MW-12, these PAH compounds were also detected. The detections of the PAH compounds and the levels measured for Iron and Manganese appear to be greater than historically measured. This could be attributed to a higher turbidity in the sample than historically observed.

#### *6.3.1.6 COMPARISON OF UP-GRADIENT TO DOWN-GRADIENT WELLS*

In general, concentrations of parameters in the down-gradient wells were less than or equal to the up-gradient concentrations, specifically:

- BTEX compound concentrations were not detected in up-gradient nor down-gradient wells.
- Concentrations of detected PAH compounds in up-gradient wells were equivalent to down-gradient wells for all locations except MW-24 which is believed to have had greater turbidity than past sampling events.
- Iron and Manganese concentrations in up-gradient wells were greater than or equivalent to down gradient wells.

#### *6.3.1.7 GROUNDWATER DATA SUMMARY*

Based on the results, while there were some exceedances of groundwater standards and guidance values in the sample data, the consistency of results over the period of monitoring and consistency of

down-gradient versus up-gradient water quality indicate the remedy continues to be effective. There continues to be no groundwater use at the Site. Given the monitoring results to date, and without the potential exposure pathway of groundwater use, the remedy at the site remains protective of human health with respect to groundwater quality. Groundwater monitoring at this site has now accumulated a database spanning 14 years and results in both upgradient and downgradient wells have remained consistent over that period.

### 6.3.2 DNAPL

#### 6.3.2.1 DNAPL System Operation

Vacuum Enhanced Fluid Recovery (VEFR) is used to remove DNAPL from wells in the Northern and Western DNAPL Recovery Systems. During DNAPL extraction, some water is also removed; however, based on visual observation, the majority of the volume removed is DNAPL. During the reporting period, a total of 873.51 gallons of DNAPL and water was extracted by Enviro Waste Oil Recovery, LLC and transported to their facility in Mahopac, New York. DNAPL monitoring and extraction forms and copies of the non-hazardous waste manifests are provided in Appendix D.

The following table presents the amounts (gallons) extracted per well and per event. DNAPL was not observed in the other DNAPL wells at the site. These results are consistent with past observations and extraction activities.

Area	Well ID	3/30/22	6/29/22	12/12/22	Totals
Western Wells	OW-1	86.45	54.33	59.72	200.50
	RW-1	59.24	110.68	34.12	204.04
	RW-2	83.25	63.39	44.36	191.00
Northern Wells	RW-3N	33.62	50.31	47.78	131.71
	RW-6N	62.44	46.28	37.54	146.26
<b>TOTALS</b>	<b>Gallons</b>	<b>325.00</b>	<b>324.99</b>	<b>223.52</b>	<b>873.51</b>

Figures showing DNAPL thickness and fluid recovery volume over time are provided in Appendix D. Least-squares linear regression was used to determine the trend lines for the DNAPL thickness over time. The trend lines show DNAPL thickness continues to decrease over time. Trend lines may not, on their own, predict future DNAPL thickness.

#### 6.3.2.2 DNAPL DATA SUMMARY

System operation is summarized as follows:

- The thickness of DNAPL in wells RW-1 and RW-2 in the Western DNAPL System shows a consistent decreasing trend since system inception of operation (2005) to the present.
- The thickness of DNAPL in wells RW-3N and RW-6N in the Northern DNAPL System shows a consistent decreasing trend since system inception of operation (2005) to the present.
- Data continues to show that DNAPL is not migrating around the DNAPL barriers.

- The DNAPL systems are being operated in general accordance with the approved SMP, continue to be effective in containing DNAPL, and the systems remain protective of human health and the environment.

### **6.3.3 Underwater Cap**

Past underwater cap inspections were in 2007, 2014, and 2019. The current frequency of monitoring is 7 years, which would require the next underwater cap inspection to take place in 2026.

Results of the most recent underwater cap inspection are presented in the *Periodic Review Report Tarrytown Former MGP site, 15 January 2020*. The report concluded the cap was found to be in satisfactory condition and performing its intended function and has done so over the 14 years represented by the three inspections to date.

### **6.3.4 Indoor Air Quality and Sub-slab Vapor Sampling**

The indoor air (IA) quality sampling and sub-slab soil vapor (SS) for newly constructed buildings was completed in previous reporting periods.

### **6.3.5 VIMS**

Vapor Intrusion Management Systems (VIMS) have been installed for the newly constructed buildings on the site, as summarized in Section 4. Post-installation testing required by the SMP for the VIMS on the site is complete and has been previously reported to NYSDEC and NYSDOH.

No new VIMS construction was performed during this reporting period.

### **6.3.6 Soil Management**

There was no soil disturbance activities performed during this reporting period.

### **6.3.7 Site Inspection**

Overall annual inspection was completed and documented (see Appendix C). As a result of the inspection and other site documentation reviewed and provided herein, we have determined that the Engineering Controls and Site Controls are in place and operating as intended. We recommend that site inspections continue on an annual basis.

## **6.4 MONITORING DEFICIENCIES**

No deficiencies in the monitoring program were identified during the reporting period.

## **6.5 CONCLUSIONS AND RECOMMENDATIONS FOR CHANGES**

Based on the data collected, the remedial actions are effective and site monitoring data of selected media (groundwater) and controls (DNAPL system, underwater cap) appear to be maintaining integrity over several years of accumulated data, therefore no changes in the monitoring program are recommended.

## **7. Operation and Maintenance Plan Compliance Report**

With the closure of the LNAPL recovery system, there are no mechanical systems operated or maintained at the site. Recovery of DNAPL is performed using a vacuum truck.

## **8. Overall PRR Conclusions and Recommendations**

### **8.1 COMPLIANCE WITH THE SMP**

Site Engineering and Institutional controls are in place and effective, as described in this report. Site monitoring and construction activities have been performed in conformance with the SMP.

### **8.2 PERFORMANCE AND EFFECTIVENESS OF THE REMEDY**

Based on site monitoring data and our annual inspection, the remedial action continues to perform and is effective as required by the SMP.

### **8.3 FUTURE PRR SUBMITTALS**

The current annual schedule for submitting the PRR is satisfactory. The next PRR will cover the year between 12 December 2022 and 30 November 2023, assuming the same PRR ending date is maintained by NYSDEC.

## **9. Commentary for the Periodic Review Report Form**

The PRR Form is contained in Appendix A to this report. The following commentary is organized according to the PRR Form.

### **9.1 BOX 1 SITE DETAILS**

1. The site information is correct, however the Reporting Period should be 30 November 2021 through 12 December 2022.
2. Property ownership for the subject site did not change during the reporting period.
3. There was no change of use during the reporting period.

### **9.2 BOX 2**

1. The site use (residential, commercial, and park) is consistent with restricted residential, commercial, and industrial uses.
2. The ICs and ECs are in place.

### **9.3 BOX 2A**

1. The validity of the Qualitative Exposure Assessment remains uncompromised.
2. The assumptions in the Qualitative Exposure Assessment remain valid.

### **9.4 BOX 3 DESCRIPTION OF INSTITUTIONAL CONTROLS**

The Institutional Controls each of the seven parcels in Box 3 are in place.

### **9.5 BOX 4 DESCRIPTION OF ENGINEERING CONTROLS.**

A summary of the status of the Engineering Controls at the site is presented in this report and below. Note that for Parcel 1-P-20, the LNAPL Recovery System was dismantled with NYSDEC approval in 2007 (see Section 4 of this report).

### **9.6 ENGINEERING CONTROL – COVER SYSTEM**

Site cover, as required by the SMP, is currently in place.

### **9.7 ENGINEERING CONTROL – VAPOR MITIGATION**

This Engineering Control refers to the soil vapor intrusion management systems (VIMS) for buildings required in the SMP. The buildings constructed on this site under the SMP have VIMS installed.

## **9.8 ENGINEERING CONTROL – “LEACHATE COLLECTION”**

For parcels 1-P-22, 1-P-23, and 1-P-24, “Leachate Collection” refers to the Northern DNAPL Recovery System. For parcel 1-P-21, “Leachate Collection” refers to the Western DNAPL Recovery System. Both of these systems are in place and functioning per the SMP.

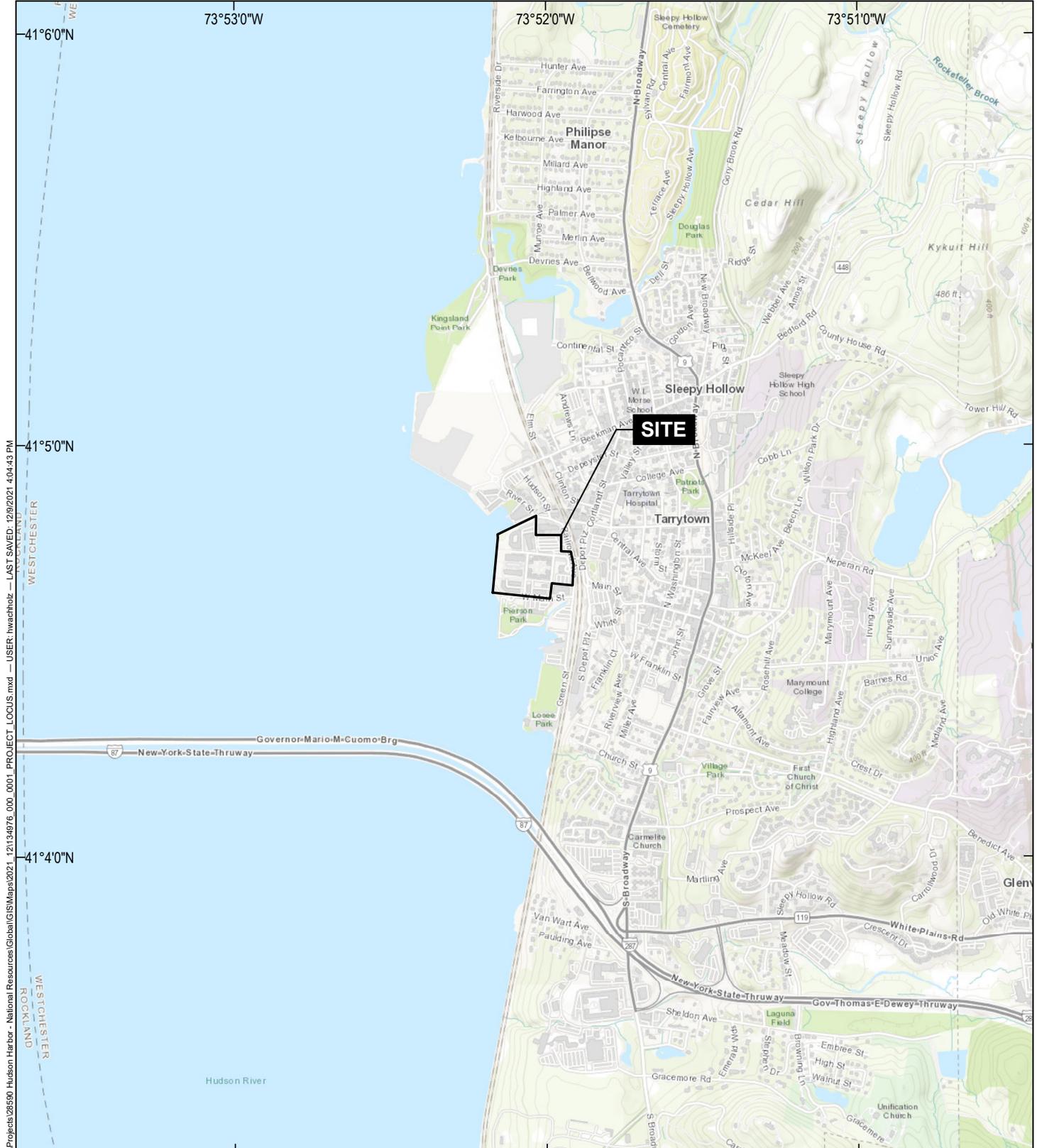
## **9.9 BOX 5 PERIODIC REVIEW REPORT (PRR) CERTIFICATION STATEMENTS**

1. The response is “Yes.” Both statements are true.
2. The response is “Yes.” Statement ‘e’ does not apply; there is no financial assurance mechanism required.

## **9.10 BOXES 6 AND 7 IC/EC CERTIFICATIONS**

Signatures are provided for the certifications.

## FIGURES



GIS FILE PATH: \\haleyaldrich.com\share\loc\_common\Projects\265590\_Hudson\_Harbor - National Resources\Global\GIS\Maps\2021\_12134976\_000\_0001\_PROJECT\_LOCUS.mxd — USER: hwachholz — LAST SAVED: 12/9/2021 4:04:43 PM



MAP SOURCE: ESRI  
 SITE COORDINATES: 73°52'2"N, 41°4'42"W

**HALEY  
ALDRICH**

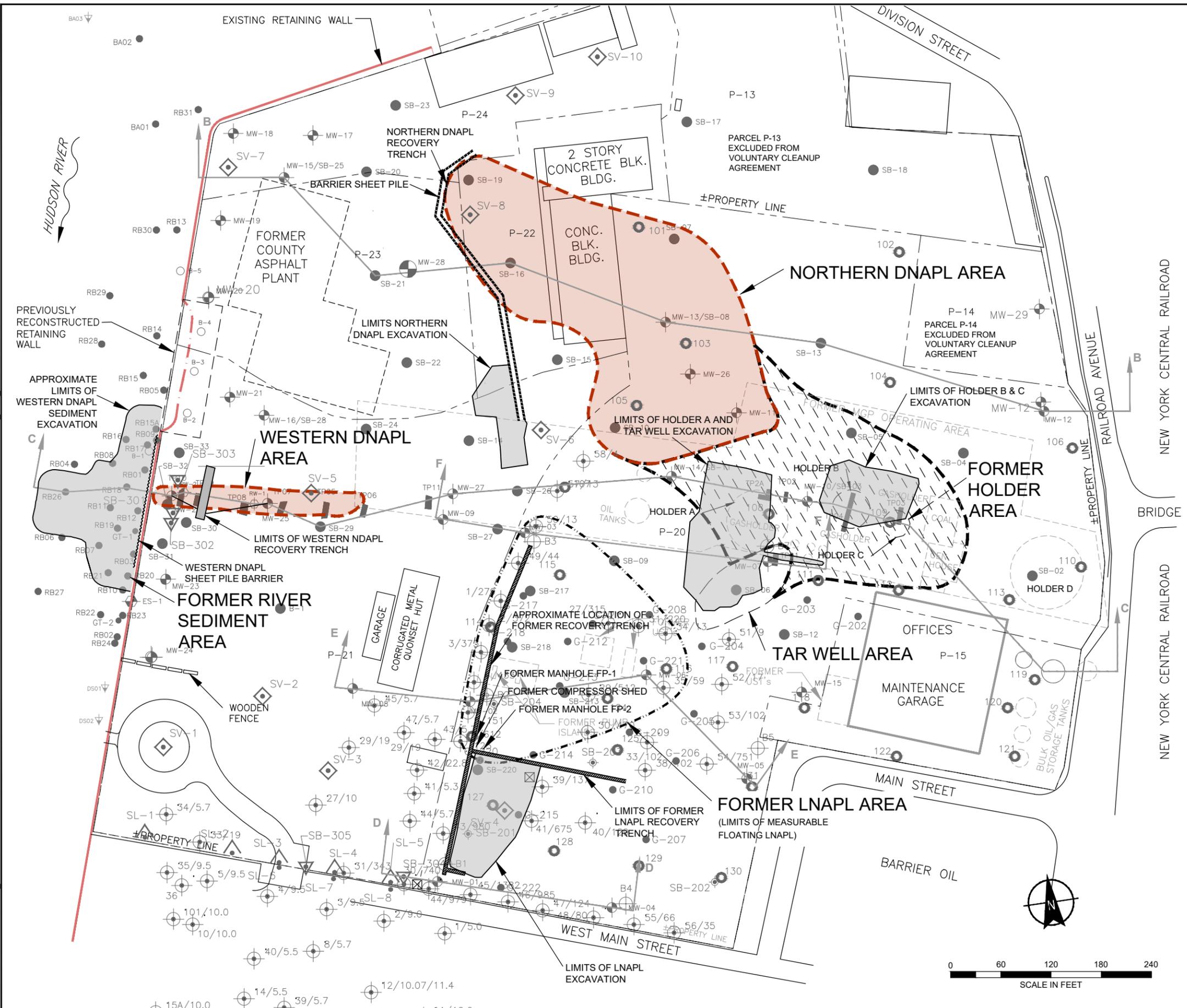
TARRYTOWN FORMER MGP SITE  
 TARRYTOWN, NEW YORK  
 FERRY LANDINGS, LLC  
 NYSDEC SITE NO. C360064

**PROJECT LOCUS**

APPROXIMATE SCALE: 1 IN = 2000 FT  
 DECEMBER 2021

**FIGURE 1**

HENSEN, KRISTIN  
 \HALEY\ALDRICH\HAREIROC\_COMMON\PROJECTS\28590 HUDSON HARBOR - NATIONAL RESOURCES\GLOBAL\CAD\DRAWINGS\28590-250-0005 SITE PLAN 2016.DWG  
 Layout: 12/9/2021 11:30 AM  
 Printed: 12/9/2021 11:30 AM



**LEGEND**

- MW-28 MONITORING WELL
- SV-1 SOIL VAPOR PROBE
- SB-301 BORING TO CHECK DNAPL LIMITS - 28'
- SL-4 SLAM BAR SOIL VAPOR SAMPLE LOCATION
- MW-01 MONITORING WELL LOCATIONS
- SB-01 SOIL BORING LOCATIONS
- RB06 RIVER BORING LOCATION
- GT-2 GEOTECHNICAL BORING LOCATION
- ES-1 RIVER MEASURING POINT
- TP03 TEST PIT LOCATIONS
- G-207 GEOPROBE BORINGS CONDUCTED BY RETEC IN OCTOBER 1996
- SB-202 SOIL BORINGS CONDUCTED BY RETEC IN OCTOBER 1996
- B-2 GEOTECHNICAL BORINGS CONDUCTED BY COUNTY ASPHALT IN MARCH 1998
- FORMER STRUCTURES
- BUILDINGS
- LNAPL AREA - LIMITS OF MEASURABLE FLOATING LNAPL
- LIMITS OF EXCAVATION
- AREAS CONTAINING ZONES OF RESIDUAL MGP DNAPL
- LENSES SATURATED WITH MGP DNAPL
- RETAINING WALL
- APPROX. LOCATIONS OF SOIL GAS SAMPLES PERFORMED BY METCALF & EDDY, DATED DECEMBER 1990. 58/4=SAMPLE#/PID RESULTS IN PPM.
- APPROX. LOCATIONS OF SOIL SAMPLE BORINGS PERFORMED BY METCALF & EDDY, DATED DECEMBER 1990. B5=PROBE NO.
- APPROX. LOCATIONS OF SOIL PROBES PERFORMED BY METCALF & EDDY, DATED DECEMBER 1994. 120=PROBE NO.

**NOTES**

BASE PLAN ILLUSTRATING EXISTING SITE STRUCTURES, FEATURES, EXISTING EXPLORATIONS AND EXTENT OF IMPACTED AREAS DERIVED FROM PARSONS ENGINEERING SCIENCE, INC., FIGURE 3-1, ENTITLED "TOTAL BTX CONCENTRATIONS IN SOIL SAMPLES, SUPPLEMENTAL INVESTIGATION TARRYTOWN SITE," DATED 28 SEPTEMBER 2000.

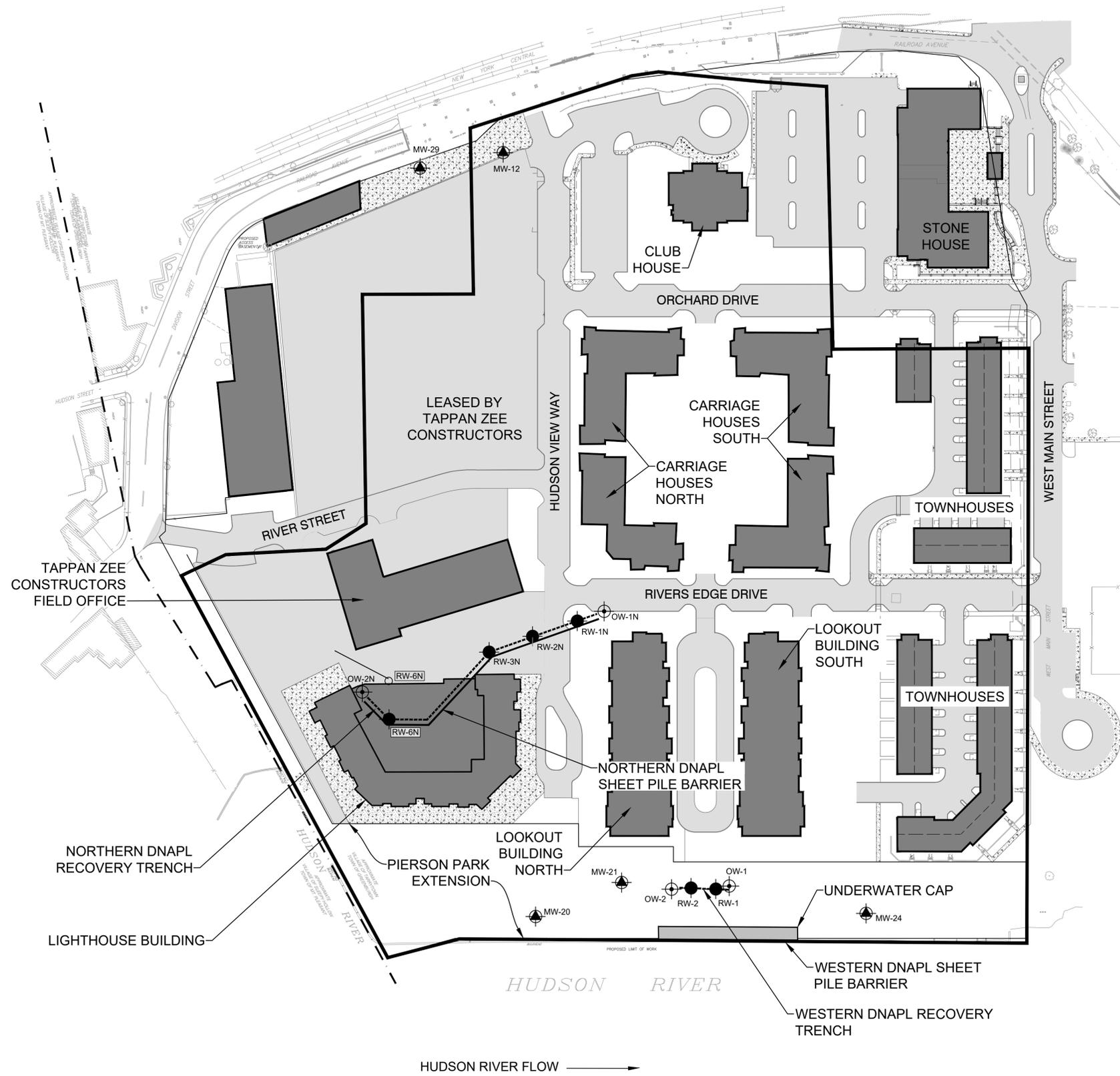


TARRYTOWN FORMER MGP SITE  
 TARRYTOWN, NEW YORK  
 FERRY LANDINGS, LLC  
 NYSDEC SITE NO. C360064

**SITE PLAN - REMEDIAL WORK AND HISTORIC EXTENT OF RESIDUAL CONTAMINATION**

SCALE: AS SHOWN  
DECEMBER 2021

**FIGURE 2**



**LEGEND**

-  GROUNDWATER MONITORING WELL
-  DNAPL RECOVERY WELL
-  DNAPL OBSERVATION WELL
-  APPROXIMATE AREA ENCOMPASSED BY THE BROWNFIELD CLEAN-UP AGREEMENT #C360064
-  LANDSCAPED AREAS (THESE AREAS CONTAIN DEMARCATION LAYER BELOW CLEAN FILL AND LANDSCAPING)
-  PAVED WALKS, PATIOS, OR COURTYARDS
-  EXISTING BUILDINGS
-  ROADS AND PARKING AREAS

**NOTES**

1. BASE MAP IS BASED ON CAD DRAWING ENTITLED "PH1\_10399-08\_PHASE.DWG," DATED 1 JULY 2009 FROM CHAZEN COMPANIES OF GLENN FALLS, NEW YORK AND "PARKING ALLOCATION DIAGRAM," DATED 7 MARCH 2013 FROM LESSARD GROUP, INC., VIENNA, VIRGINIA.



TARRYTOWN FORMER MGP SITE  
 TARRYTOWN, NEW YORK  
 FERRY LANDINGS, LLC  
 NYSDEC SITE NO. C360064

**SITE COVER PLAN**

SCALE: AS SHOWN  
 DECEMBER 2021

**FIGURE 3**

**APPENDIX A**

**Periodic Review Report Form**



**Enclosure 2**  
**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**Site Management Periodic Review Report Notice**  
**Institutional and Engineering Controls Certification Form**



	Site Details	Box 1	
<b>Site No.</b>	<b>C360064</b>		
<b>Site Name CE - Tarrytown MGP</b>			
Site Address: 129 West Main Street    Zip Code: 10591			
City/Town: Tarrytown			
County: Westchester			
Site Acreage: 20.000			
Reporting Period: <del>November 30, 2021 to November 30, 2022</del> November 30, 2021 to December 12, 2022			
		YES	NO
1.	Is the information above correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, include handwritten above or on a separate sheet.			
2.	Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.	Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.	Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.</b>			
5.	Is the site currently undergoing development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<b>Box 2</b>	
		YES	NO
6.	Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7.	Are all ICs in place and functioning as designed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.</b>			
<b>A Corrective Measures Work Plan must be submitted along with this form to address these issues.</b>			
_____ Signature of Owner, Remedial Party or Designated Representative		_____ Date	

**Box 2A**

YES      NO

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?

**If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.**

9. Are the assumptions in the Qualitative Exposure Assessment still valid?  
(The Qualitative Exposure Assessment must be certified every five years)

**If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.**

**SITE NO. C360064**

**Box 3**

**Description of Institutional Controls**

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
<b>1-P-20</b>	Ferry Investments, LLC	Ground Water Use Restriction Landuse Restriction  O&M Plan  Site Management Plan
<p>Inst. Controls:(i) Any proposed soil excavation on the Controlled Property below the 2 foot cover or below the demarcation layer requires prior notification to the NYSDEC in accordance with the approved Site Management Plan. Excavated soil must be managed, characterized, and properly disposed in accordance with the approved Site Management Plan and applicable regulations and/or guidance. (ii) The use of untreated groundwater for any purpose is not permitted.</p>		
<b>1-P-22</b>	Westchester Industries, Inc.	O&M Plan  Site Management Plan Ground Water Use Restriction Landuse Restriction
<p>Inst. Controls:(i) Any proposed soil excavation on the Controlled Property below the 2 foot cover or below the demarcation layer requires prior notification to the NYSDEC in accordance with the approved Site Management Plan. Excavated soil must be managed, characterized, and properly disposed in accordance with the approved Site Management Plan and applicable regulations and/or guidance. (ii) The use of untreated groundwater for any purpose is not permitted.</p>		
<b>1-P-23</b>	Westchester Industries	Site Management Plan O&M Plan Ground Water Use Restriction Landuse Restriction
<p>Inst. Controls:(i) Any proposed soil excavation on the Controlled Property below the 2 foot cover or below the demarcation layer requires prior notification to the NYSDEC in accordance with the approved Site Management Plan. Excavated soil must be managed, characterized, and properly disposed in accordance with the approved Site Management Plan and applicable regulations and/or guidance. (ii) The use of untreated groundwater for any purpose is not permitted.</p>		
<b>1-P-24</b>	Ferry Landings, LLC	Site Management Plan O&M Plan Ground Water Use Restriction Landuse Restriction
<p>Inst. Controls:(i) Any proposed soil excavation on the Controlled Property below the 2 foot cover or below the demarcation layer requires prior notification to the NYSDEC in accordance with the approved Site Management Plan. Excavated soil must be managed, characterized, and properly disposed in accordance with the approved Site Management Plan and applicable regulations and/or guidance. (ii) The use of untreated groundwater for any purpose is not permitted.</p>		
<b>1-P15</b>	Ferry Investments, LLC	O&M Plan Site Management Plan Ground Water Use Restriction Landuse Restriction

Inst. Controls: (i) Any proposed soil excavation on the Controlled Property below the 2 foot cover or below the demarcation layer requires prior notification to the NYSDEC in accordance with the approved Site Management Plan. Excavated soil must be managed, characterized, and properly disposed in accordance with the approved Site Management Plan and applicable regulations and/or guidance.

(ii) The use of untreated groundwater for any purpose is not permitted.

**1-P21**

Westchester Industries

Site Management Plan  
Ground Water Use Restriction  
O&M Plan  
Landuse Restriction

Inst. Controls: (i) Any proposed soil excavation on the Controlled Property below the 2 foot cover or below the demarcation layer requires prior notification to the NYSDEC in accordance with the approved Site Management Plan. Excavated soil must be managed, characterized, and properly disposed in accordance with the approved Site Management Plan and applicable regulations and/or guidance. (ii) The use of untreated groundwater for any purpose is not permitted.

**1-P24A**

Ferry Landings, LLC

Site Management Plan  
O&M Plan  
Ground Water Use Restriction  
Landuse Restriction

Inst. Controls: (i) Any proposed soil excavation on the Controlled Property below the 2 foot cover or below the demarcation layer requires prior notification to the NYSDEC in accordance with the approved Site Management Plan. Excavated soil must be managed, characterized, and properly disposed in accordance with the approved Site Management Plan and applicable regulations and/or guidance. (ii) The use of untreated groundwater for any purpose is not permitted.

**Box 4**

**Description of Engineering Controls**

Parcel

Engineering Control

**1-P-20**

Cover System  
Vapor Mitigation

Eng. Controls: (i) In areas not proposed for future building construction or impervious covering, residually contaminated soils on the Controlled Property that meet backfill criteria as stipulated in Section 3.4 of the approved Site Management Plan, must be covered by a demarcation layer consisting of an orange, non-woven, 4 oz/sy geotextile and must be covered with 2 feet of clean imported fill material. This barrier must be maintained as per the approved Site Management Plan; and (ii) A passive Soil Vapor Management System (SVMS) must be installed in every new building erected within the Controlled Property. Newly constructed buildings within the Controlled Property shall also be subjected to a Soil Vapor Intrusion (SVI) Investigation, conducted in accordance with the applicable guidance in effect at the time of the investigation. If the results of this SVI investigation demonstrate ineffectiveness of the existing passive SVMS, an appropriate active Soil Vapor Management System shall be designed, constructed and maintained. (iii) Operate and maintain the LNAPL Recovery System depicted in Figure 2 as set forth in Section 3 of OM&MP which is Appendix A to the approved Site Management Plan.

**1-P-22**

Vapor Mitigation  
Cover System  
Leachate Collection  
Subsurface Barriers

Eng. Controls: (i) In areas not proposed for future building construction or impervious covering, residually contaminated soils on the Controlled Property that meet backfill criteria as stipulated in Section 3.4 of the approved Site Management Plan, must be covered by a demarcation layer consisting of an orange, non-woven, 4 oz/sy geotextile and must be covered with 2 feet of clean imported fill material. This barrier must be maintained as per the approved Site Management Plan; and (ii) A passive Soil Vapor Management System (SVMS) must be installed in every new building erected

Parcel

Engineering Control

within the Controlled Property. Newly constructed buildings within the Controlled Property shall also be subjected to a Soil Vapor Intrusion (SVI) Investigation, conducted in accordance with the applicable guidance in effect at the time of the investigation. If the results of this SVI investigation demonstrate ineffectiveness of the existing passive SVMS, an appropriate active Soil Vapor Management System shall be designed, constructed and maintained. (iii) Operate and maintain the Northern DNAPL Recovery System depicted in Figure 2 as set forth in Section 2 of OM&MP which is Appendix A to the approved Site Management Plan.

**1-P-23**

Vapor Mitigation  
Cover System  
Leachate Collection

Eng. Controls: (i) In areas not proposed for future building construction or impervious covering, residually contaminated soils on the Controlled Property that meet backfill criteria as stipulated in Section 3.4 of the approved Site Management Plan, must be covered by a demarcation layer consisting of an orange, non-woven, 4 oz/sy geotextile and must be covered with 2 feet of clean imported fill material. This barrier must be maintained as per the approved Site Management Plan; and (ii) A passive Soil Vapor Management System (SVMS) must be installed in every new building erected within the Controlled Property. Newly constructed buildings within the Controlled Property shall also be subjected to a Soil Vapor Intrusion (SVI) Investigation, conducted in accordance with the applicable guidance in effect at the time of the investigation. If the results of this SVI investigation demonstrate ineffectiveness of the existing passive SVMS, an appropriate active Soil Vapor Management System shall be designed, constructed and maintained. (iii) Operate and maintain the Northern DNAPL Recovery System depicted on Figure 2 as set forth in Section 2 of OM&MP which is Appendix A to the approved Site Management Plan.

**1-P-24**

Vapor Mitigation  
Cover System  
Leachate Collection  
Subsurface Barriers

Eng. Controls: (i) In areas not proposed for future building construction or impervious covering, residually contaminated soils on the Controlled Property that meet backfill criteria as stipulated in Section 3.4 of the approved Site Management Plan, must be covered by a demarcation layer consisting of an orange, non-woven, 4 oz/sy geotextile and must be covered with 2 feet of clean imported fill material. This barrier must be maintained as per the approved Site Management Plan; and (ii) A passive Soil Vapor Management System (SVMS) must be installed in every new building erected within the Controlled Property. Newly constructed buildings within the Controlled Property shall also be subjected to a Soil Vapor Intrusion (SVI) Investigation, conducted in accordance with the applicable guidance in effect at the time of the investigation. If the results of this SVI investigation demonstrate ineffectiveness of the existing passive SVMS, an appropriate active Soil Vapor Management System shall be designed, constructed and maintained. (iii) Operate and maintain the Northern DNAPL Recovery System depicted on Figure 2 as set forth in Section 2 of OM&MP which is Appendix A to the approved Site Management Plan.

**1-P15**

Vapor Mitigation  
Cover System

Eng. Controls: (i) In areas not proposed for future building construction or impervious covering, residually contaminated soils on the Controlled Property that meet backfill criteria as stipulated in Section 3.4 of the approved Site Management Plan, must be covered by a demarcation layer consisting of an orange, non-woven, 4 oz/sy geotextile and must be covered with 2 feet of clean imported fill material. This barrier must be maintained as per the approved Site Management Plan; and (ii) A passive Soil Vapor Management System (SVMS) must be installed in every new building erected within the Controlled Property. Newly constructed buildings within the Controlled Property shall also be subjected to a Soil Vapor Intrusion (SVI) Investigation, conducted in accordance with the applicable guidance in effect at the time of the investigation. If the results of this SVI investigation demonstrate ineffectiveness of the existing passive SVMS, an appropriate active Soil Vapor Management System shall be designed, constructed and maintained.

**1-P21**

Vapor Mitigation  
Cover System  
Leachate Collection

Eng. Controls: (i) In areas not proposed for future building construction or impervious covering,

Parcel

Engineering Control

residually contaminated soils on the Controlled Property that meet backfill criteria as stipulated in Section 3.4 of the approved Site Management Plan, must be covered by a demarcation layer consisting of an orange, non-woven, 4 oz/sy geotextile and must be covered with 2 feet of clean imported fill material. This barrier must be maintained as per the approved Site Management Plan; and (ii) A passive Soil Vapor Management System (SVMS) must be installed in every new building erected within the Controlled Property. Newly constructed buildings within the Controlled Property shall also be subjected to a Soil Vapor Intrusion (SVI) Investigation, conducted in accordance with the applicable guidance in effect at the time of the investigation. If the results of this SVI investigation demonstrate ineffectiveness of the existing passive SVMS, an appropriate active Soil Vapor Management System shall be designed, constructed and maintained. (iii) Operate and maintain the Western DNAPL Recovery System depicted on Figure 2 as set forth in Section 2 of OM&MP which is Appendix A to the approved Site Management Plan.

**1-P24A**

Vapor Mitigation  
Cover System

Eng. Controls: (i) In areas not proposed for future building construction or impervious covering, residually contaminated soils on the Controlled Property that meet backfill criteria as stipulated in Section 3.4 of the approved Site Management Plan, must be covered by a demarcation layer consisting of an orange, non-woven, 4 oz/sy geotextile and must be covered with 2 feet of clean imported fill material. This barrier must be maintained as per the approved Site Management Plan; and (ii) A passive Soil Vapor Management System (SVMS) must be installed in every new building erected within the Controlled Property. Newly constructed buildings within the Controlled Property shall also be subjected to a Soil Vapor Intrusion (SVI) Investigation, conducted in accordance with the applicable guidance in effect at the time of the investigation. If the results of this SVI investigation demonstrate ineffectiveness of the existing passive SVMS, an appropriate active Soil Vapor Management System shall be designed, constructed and maintained.

**Periodic Review Report (PRR) Certification Statements**

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

(a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and  
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

\_\_\_\_\_  
Signature of Owner, Remedial Party or Designated Representative

\_\_\_\_\_  
Date

IC CERTIFICATIONS  
SITE NO. C360064

Box 6

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Carl Monheit at 485 West Putnam Ave., Greenwich, CT 06830,  
print name print business address

am certifying as Designated Representative (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.



Signature of Owner, Remedial Party, or Designated Representative  
Rendering Certification

12/19/22  
Date

EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Scott A. Underhill at Haley & Aldrich of New York  
print name print business address  
200 Town Centre Drive, Suite 2, Rochester, NY 14623

am certifying as a Professional Engineer for the owner  
(Owner or Remedial Party)

Scott A. Underhill  
Signature of Professional Engineer, for the Owner or  
Remedial Party, Rendering Certification



12/19/2022  
Date

**Enclosure 3**  
**Periodic Review Report (PRR) General Guidance**

- I. Executive Summary: (1/2-page or less)
  - A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
  - B. Effectiveness of the Remedial Program - Provide overall conclusions regarding:
    1. progress made during the reporting period toward meeting the remedial objectives for the site
    2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
  - C. Compliance
    1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
    2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
  - D. Recommendations
    1. recommend whether any changes to the SMP are needed
    2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
    3. recommend whether the requirements for discontinuing site management have been met.
  
- II. Site Overview (one page or less)
  - A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
  - B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.
  
- III. Evaluate Remedy Performance, Effectiveness, and Protectiveness  
Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.
  
- IV. IC/EC Plan Compliance Report (if applicable)
  - A. IC/EC Requirements and Compliance
    1. Describe each control, its objective, and how performance of the control is evaluated.
    2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
    3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
    4. Conclusions and recommendations for changes.
  - B. IC/EC Certification
    1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).
  
- V. Monitoring Plan Compliance Report (if applicable)
  - A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
  - B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
  - C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
  - D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
  - E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.
  
- VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
  - A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
  - B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.

- C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluate the ability of each component of the remedy subject to O&M requirements to perform as designed/expected.
- D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.
- E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

#### VII. Overall PRR Conclusions and Recommendations

- A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
  - 1. whether all requirements of each plan were met during the reporting period
  - 2. any requirements not met
  - 3. proposed plans and a schedule for coming into full compliance.
- B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.
- C. Future PRR Submittals
  - 1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
  - 2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

#### VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

**APPENDIX B**

**NYSDEC Correspondence**

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation

625 Broadway, 11<sup>th</sup> Floor, Albany, NY 12233-7020

P: (518)402-9543 | F: (518)402-9547

[www.dec.ny.gov](http://www.dec.ny.gov)

10/18/2022

Carl Monheit  
Ferry Landings, LLC  
485 West Putnam Ave.  
Greenwich, CT 06830  
[cmonheit@nationalresources.com](mailto:cmonheit@nationalresources.com)

## Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal

**Site Name:** CE - Tarrytown MGP

**Site No.:** C360064

**Site Address:** 129 West Main Street  
Tarrytown, NY 10591

Dear Carl Monheit:

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of, and compliance with, site-specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (available online at <http://www.dec.ny.gov/regulations/67386.html>) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than **December 30, 2022**. Guidance on the content of a PRR is enclosed.

Site Management is defined in regulation (6 NYCRR 375-1.2(at)) and in Chapter 6 of DER-10. Depending on when the remedial program for your site was completed, SM may be governed by multiple documents (e.g., Operation, Maintenance, and Monitoring Plan; Soil Management Plan) or one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional controls and/or engineering controls (“IC/EC Plan”); a plan for monitoring the performance and effectiveness of the selected remedy (“Monitoring Plan”); and/or a plan for the operation and maintenance of the selected remedy (“O&M Plan”). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

When you submit the PRR (by the due date above), include the enclosed forms documenting that all SM requirements are being met. The Institutional Controls (ICs) portion of the form (Box 6) must be signed by you or your designated representative. The Engineering Controls (ECs) portion of the form (Box 7) must be signed by a Professional Engineer (PE). If you cannot certify that all SM requirements are being met, you must submit a Corrective Measures Work Plan that identifies the actions to be taken to restore compliance. The work plan must include a schedule to be approved by the Department. The Periodic Review process will not be considered complete until all necessary corrective measures are completed and all required controls are certified. Instructions for completing the certifications are enclosed.



All site-related documents and data, including the PRR, must be submitted in electronic format to the Department of Environmental Conservation. The required format for documents is an Adobe PDF file with optical character recognition and no password protection. Data must be submitted as an electronic data deliverable (EDD) according to the instructions on the following webpage:

<https://www.dec.ny.gov/chemical/62440.html>

Documents may be submitted to the project manager either through electronic mail or by using the Department's file transfer service at the following webpage:

<https://fts.dec.state.ny.us/fts/>

The Department will not approve the PRR unless all documents and data generated in support of the PRR have been submitted using the required formats and protocols.

You may contact Michael Squire, the Project Manager, at 518-402-9546 or michael.squire@dec.ny.gov with any questions or concerns about the site. Please notify the project manager before conducting inspections or field work. You may also write to the project manager at the following address:

New York State Department of Environmental Conservation  
Division of Environmental Remediation, BURC  
625 Broadway

Albany, NY 12233-7014

#### Enclosures

PRR General Guidance  
Certification Form Instructions  
Certification Forms

ec: w/ enclosures

Ferry Investments, LLC - cmonheit@nationalresources.com  
Ferry Landings, LLC - cmonheit@nationalresources.com  
Westchester Industries - cmonheit@nationalresources.com  
Westchester Industries, Inc. - cmonheit@nationalresources.com  
FERRY INVESTMENT, LLC - Carl Monheit - cmonheit@nationalresources.com

ec: w/ enclosures

Michael Squire, Project Manager  
Amen M. Omorogbe, Section Chief  
Dan Bendell, Hazardous Waste Remediation Supervisor, Region 3  
David Pollock, Region 3  
Haley & Aldrich - Vince Dick - VDick@haleyaldrich.com  
Haley & Aldrich of New York - Die Fu - dfu@haleyaldrich.com

## Enclosure 1

### Certification Instructions

#### I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

#### II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

#### III. IC/EC Certification by Signature (Box 6 and Box 7):

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.
- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.



**Enclosure 2**  
**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**Site Management Periodic Review Report Notice**  
**Institutional and Engineering Controls Certification Form**



	Site Details	Box 1	
<b>Site No.</b>	<b>C360064</b>		
<b>Site Name CE - Tarrytown MGP</b>			
Site Address: 129 West Main Street    Zip Code: 10591			
City/Town: Tarrytown			
County: Westchester			
Site Acreage: 20.000			
Reporting Period: November 30, 2021 to November 30, 2022			
		YES	NO
1.	Is the information above correct?	<input type="checkbox"/>	<input type="checkbox"/>
	If NO, include handwritten above or on a separate sheet.		
2.	Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/>	<input type="checkbox"/>
3.	Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input type="checkbox"/>
4.	Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input type="checkbox"/>
	<b>If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.</b>		
5.	Is the site currently undergoing development?	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Box 2</b>	
		YES	NO
6.	Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	<input type="checkbox"/>	<input type="checkbox"/>
7.	Are all ICs in place and functioning as designed?	<input type="checkbox"/>	<input type="checkbox"/>
<b>IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.</b>			
<b>A Corrective Measures Work Plan must be submitted along with this form to address these issues.</b>			
_____ Signature of Owner, Remedial Party or Designated Representative		_____ Date	

**Box 2A**

YES      NO

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?

**If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.**

9. Are the assumptions in the Qualitative Exposure Assessment still valid?  
(The Qualitative Exposure Assessment must be certified every five years)

**If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.**

**SITE NO. C360064**

**Box 3**

**Description of Institutional Controls**

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
<b>1-P-20</b>	Ferry Investments, LLC	Ground Water Use Restriction Landuse Restriction  O&M Plan  Site Management Plan
<p>Inst. Controls:(i) Any proposed soil excavation on the Controlled Property below the 2 foot cover or below the demarcation layer requires prior notification to the NYSDEC in accordance with the approved Site Management Plan. Excavated soil must be managed, characterized, and properly disposed in accordance with the approved Site Management Plan and applicable regulations and/or guidance. (ii) The use of untreated groundwater for any purpose is not permitted.</p>		
<b>1-P-22</b>	Westchester Industries, Inc.	O&M Plan  Site Management Plan Ground Water Use Restriction Landuse Restriction
<p>Inst. Controls:(i) Any proposed soil excavation on the Controlled Property below the 2 foot cover or below the demarcation layer requires prior notification to the NYSDEC in accordance with the approved Site Management Plan. Excavated soil must be managed, characterized, and properly disposed in accordance with the approved Site Management Plan and applicable regulations and/or guidance. (ii) The use of untreated groundwater for any purpose is not permitted.</p>		
<b>1-P-23</b>	Westchester Industries	Site Management Plan O&M Plan Ground Water Use Restriction Landuse Restriction
<p>Inst. Controls:(i) Any proposed soil excavation on the Controlled Property below the 2 foot cover or below the demarcation layer requires prior notification to the NYSDEC in accordance with the approved Site Management Plan. Excavated soil must be managed, characterized, and properly disposed in accordance with the approved Site Management Plan and applicable regulations and/or guidance. (ii) The use of untreated groundwater for any purpose is not permitted.</p>		
<b>1-P-24</b>	Ferry Landings, LLC	Site Management Plan O&M Plan Ground Water Use Restriction Landuse Restriction
<p>Inst. Controls:(i) Any proposed soil excavation on the Controlled Property below the 2 foot cover or below the demarcation layer requires prior notification to the NYSDEC in accordance with the approved Site Management Plan. Excavated soil must be managed, characterized, and properly disposed in accordance with the approved Site Management Plan and applicable regulations and/or guidance. (ii) The use of untreated groundwater for any purpose is not permitted.</p>		
<b>1-P15</b>	Ferry Investments, LLC	O&M Plan Site Management Plan Ground Water Use Restriction Landuse Restriction

Inst. Controls: (i) Any proposed soil excavation on the Controlled Property below the 2 foot cover or below the demarcation layer requires prior notification to the NYSDEC in accordance with the approved Site Management Plan. Excavated soil must be managed, characterized, and properly disposed in accordance with the approved Site Management Plan and applicable regulations and/or guidance.

(ii) The use of untreated groundwater for any purpose is not permitted.

**1-P21**

Westchester Industries

Site Management Plan  
Ground Water Use Restriction  
O&M Plan  
Landuse Restriction

Inst. Controls: (i) Any proposed soil excavation on the Controlled Property below the 2 foot cover or below the demarcation layer requires prior notification to the NYSDEC in accordance with the approved Site Management Plan. Excavated soil must be managed, characterized, and properly disposed in accordance with the approved Site Management Plan and applicable regulations and/or guidance. (ii) The use of untreated groundwater for any purpose is not permitted.

**1-P24A**

Ferry Landings, LLC

Site Management Plan  
O&M Plan  
Ground Water Use Restriction  
Landuse Restriction

Inst. Controls: (i) Any proposed soil excavation on the Controlled Property below the 2 foot cover or below the demarcation layer requires prior notification to the NYSDEC in accordance with the approved Site Management Plan. Excavated soil must be managed, characterized, and properly disposed in accordance with the approved Site Management Plan and applicable regulations and/or guidance. (ii) The use of untreated groundwater for any purpose is not permitted.

**Box 4**

**Description of Engineering Controls**

Parcel

Engineering Control

**1-P-20**

Cover System  
Vapor Mitigation

Eng. Controls: (i) In areas not proposed for future building construction or impervious covering, residually contaminated soils on the Controlled Property that meet backfill criteria as stipulated in Section 3.4 of the approved Site Management Plan, must be covered by a demarcation layer consisting of an orange, non-woven, 4 oz/sy geotextile and must be covered with 2 feet of clean imported fill material. This barrier must be maintained as per the approved Site Management Plan; and (ii) A passive Soil Vapor Management System (SVMS) must be installed in every new building erected within the Controlled Property. Newly constructed buildings within the Controlled Property shall also be subjected to a Soil Vapor Intrusion (SVI) Investigation, conducted in accordance with the applicable guidance in effect at the time of the investigation. If the results of this SVI investigation demonstrate ineffectiveness of the existing passive SVMS, an appropriate active Soil Vapor Management System shall be designed, constructed and maintained. (iii) Operate and maintain the LNAPL Recovery System depicted in Figure 2 as set forth in Section 3 of OM&MP which is Appendix A to the approved Site Management Plan.

**1-P-22**

Vapor Mitigation  
Cover System  
Leachate Collection  
Subsurface Barriers

Eng. Controls: (i) In areas not proposed for future building construction or impervious covering, residually contaminated soils on the Controlled Property that meet backfill criteria as stipulated in Section 3.4 of the approved Site Management Plan, must be covered by a demarcation layer consisting of an orange, non-woven, 4 oz/sy geotextile and must be covered with 2 feet of clean imported fill material. This barrier must be maintained as per the approved Site Management Plan; and (ii) A passive Soil Vapor Management System (SVMS) must be installed in every new building erected

Parcel

Engineering Control

within the Controlled Property. Newly constructed buildings within the Controlled Property shall also be subjected to a Soil Vapor Intrusion (SVI) Investigation, conducted in accordance with the applicable guidance in effect at the time of the investigation. If the results of this SVI investigation demonstrate ineffectiveness of the existing passive SVMS, an appropriate active Soil Vapor Management System shall be designed, constructed and maintained. (iii) Operate and maintain the Northern DNAPL Recovery System depicted in Figure 2 as set forth in Section 2 of OM&MP which is Appendix A to the approved Site Management Plan.

**1-P-23**

Vapor Mitigation  
Cover System  
Leachate Collection

Eng. Controls: (i) In areas not proposed for future building construction or impervious covering, residually contaminated soils on the Controlled Property that meet backfill criteria as stipulated in Section 3.4 of the approved Site Management Plan, must be covered by a demarcation layer consisting of an orange, non-woven, 4 oz/sy geotextile and must be covered with 2 feet of clean imported fill material. This barrier must be maintained as per the approved Site Management Plan; and (ii) A passive Soil Vapor Management System (SVMS) must be installed in every new building erected within the Controlled Property. Newly constructed buildings within the Controlled Property shall also be subjected to a Soil Vapor Intrusion (SVI) Investigation, conducted in accordance with the applicable guidance in effect at the time of the investigation. If the results of this SVI investigation demonstrate ineffectiveness of the existing passive SVMS, an appropriate active Soil Vapor Management System shall be designed, constructed and maintained. (iii) Operate and maintain the Northern DNAPL Recovery System depicted on Figure 2 as set forth in Section 2 of OM&MP which is Appendix A to the approved Site Management Plan.

**1-P-24**

Vapor Mitigation  
Cover System  
Leachate Collection  
Subsurface Barriers

Eng. Controls: (i) In areas not proposed for future building construction or impervious covering, residually contaminated soils on the Controlled Property that meet backfill criteria as stipulated in Section 3.4 of the approved Site Management Plan, must be covered by a demarcation layer consisting of an orange, non-woven, 4 oz/sy geotextile and must be covered with 2 feet of clean imported fill material. This barrier must be maintained as per the approved Site Management Plan; and (ii) A passive Soil Vapor Management System (SVMS) must be installed in every new building erected within the Controlled Property. Newly constructed buildings within the Controlled Property shall also be subjected to a Soil Vapor Intrusion (SVI) Investigation, conducted in accordance with the applicable guidance in effect at the time of the investigation. If the results of this SVI investigation demonstrate ineffectiveness of the existing passive SVMS, an appropriate active Soil Vapor Management System shall be designed, constructed and maintained. (iii) Operate and maintain the Northern DNAPL Recovery System depicted on Figure 2 as set forth in Section 2 of OM&MP which is Appendix A to the approved Site Management Plan.

**1-P15**

Vapor Mitigation  
Cover System

Eng. Controls: (i) In areas not proposed for future building construction or impervious covering, residually contaminated soils on the Controlled Property that meet backfill criteria as stipulated in Section 3.4 of the approved Site Management Plan, must be covered by a demarcation layer consisting of an orange, non-woven, 4 oz/sy geotextile and must be covered with 2 feet of clean imported fill material. This barrier must be maintained as per the approved Site Management Plan; and (ii) A passive Soil Vapor Management System (SVMS) must be installed in every new building erected within the Controlled Property. Newly constructed buildings within the Controlled Property shall also be subjected to a Soil Vapor Intrusion (SVI) Investigation, conducted in accordance with the applicable guidance in effect at the time of the investigation. If the results of this SVI investigation demonstrate ineffectiveness of the existing passive SVMS, an appropriate active Soil Vapor Management System shall be designed, constructed and maintained.

**1-P21**

Vapor Mitigation  
Cover System  
Leachate Collection

Eng. Controls: (i) In areas not proposed for future building construction or impervious covering,

Parcel

Engineering Control

residually contaminated soils on the Controlled Property that meet backfill criteria as stipulated in Section 3.4 of the approved Site Management Plan, must be covered by a demarcation layer consisting of an orange, non-woven, 4 oz/sy geotextile and must be covered with 2 feet of clean imported fill material. This barrier must be maintained as per the approved Site Management Plan; and (ii) A passive Soil Vapor Management System (SVMS) must be installed in every new building erected within the Controlled Property. Newly constructed buildings within the Controlled Property shall also be subjected to a Soil Vapor Intrusion (SVI) Investigation, conducted in accordance with the applicable guidance in effect at the time of the investigation. If the results of this SVI investigation demonstrate ineffectiveness of the existing passive SVMS, an appropriate active Soil Vapor Management System shall be designed, constructed and maintained. (iii) Operate and maintain the Western DNAPL Recovery System depicted on Figure 2 as set forth in Section 2 of OM&MP which is Appendix A to the approved Site Management Plan.

**1-P24A**

Vapor Mitigation  
Cover System

Eng. Controls: (i) In areas not proposed for future building construction or impervious covering, residually contaminated soils on the Controlled Property that meet backfill criteria as stipulated in Section 3.4 of the approved Site Management Plan, must be covered by a demarcation layer consisting of an orange, non-woven, 4 oz/sy geotextile and must be covered with 2 feet of clean imported fill material. This barrier must be maintained as per the approved Site Management Plan; and (ii) A passive Soil Vapor Management System (SVMS) must be installed in every new building erected within the Controlled Property. Newly constructed buildings within the Controlled Property shall also be subjected to a Soil Vapor Intrusion (SVI) Investigation, conducted in accordance with the applicable guidance in effect at the time of the investigation. If the results of this SVI investigation demonstrate ineffectiveness of the existing passive SVMS, an appropriate active Soil Vapor Management System shall be designed, constructed and maintained.

**Periodic Review Report (PRR) Certification Statements**

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

(a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

\_\_\_\_\_  
 Signature of Owner, Remedial Party or Designated Representative

\_\_\_\_\_  
 Date

**IC CERTIFICATIONS  
SITE NO. C360064**

**Box 6**

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I \_\_\_\_\_ at \_\_\_\_\_,  
print name print business address

am certifying as \_\_\_\_\_(Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

\_\_\_\_\_  
Signature of Owner, Remedial Party, or Designated Representative  
Rendering Certification

\_\_\_\_\_  
Date

**EC CERTIFICATIONS**

**Box 7**

**Professional Engineer Signature**

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I \_\_\_\_\_ at \_\_\_\_\_,  
print name print business address

am certifying as a Professional Engineer for the \_\_\_\_\_  
(Owner or Remedial Party)

\_\_\_\_\_  
Signature of Professional Engineer, for the Owner or  
Remedial Party, Rendering Certification

\_\_\_\_\_  
Stamp  
(Required for PE)

\_\_\_\_\_  
Date

**Enclosure 3**  
**Periodic Review Report (PRR) General Guidance**

- I. Executive Summary: (1/2-page or less)
  - A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
  - B. Effectiveness of the Remedial Program - Provide overall conclusions regarding:
    1. progress made during the reporting period toward meeting the remedial objectives for the site
    2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
  - C. Compliance
    1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
    2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
  - D. Recommendations
    1. recommend whether any changes to the SMP are needed
    2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
    3. recommend whether the requirements for discontinuing site management have been met.
  
- II. Site Overview (one page or less)
  - A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
  - B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.
  
- III. Evaluate Remedy Performance, Effectiveness, and Protectiveness  
Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.
  
- IV. IC/EC Plan Compliance Report (if applicable)
  - A. IC/EC Requirements and Compliance
    1. Describe each control, its objective, and how performance of the control is evaluated.
    2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
    3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
    4. Conclusions and recommendations for changes.
  - B. IC/EC Certification
    1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).
  
- V. Monitoring Plan Compliance Report (if applicable)
  - A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
  - B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
  - C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
  - D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
  - E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.
  
- VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
  - A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
  - B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.

- C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluate the ability of each component of the remedy subject to O&M requirements to perform as designed/expected.
- D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.
- E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

#### VII. Overall PRR Conclusions and Recommendations

- A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
  - 1. whether all requirements of each plan were met during the reporting period
  - 2. any requirements not met
  - 3. proposed plans and a schedule for coming into full compliance.
- B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.
- C. Future PRR Submittals
  - 1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
  - 2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

#### VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

**APPENDIX C**

**Annual Site Inspection Form**



# SMP - ANNUAL SITE INSPECTION

<b>PROJECT</b>	Tarrytown Former MGP Site	<b>Prepared By:</b> Sebastian Sotomayor	<b>Routine/Nonroutine Inspection:</b> Routine Annual
<b>LOCATION</b>	Tarrytown, NY	<b>Company:</b> Haley & Aldrich	<b>Weather:</b> Partly Cloudy 30s F
<b>DATE(s)</b>	12/12/2022	<b>Title:</b> Staff Environmental Engineer	<b>Other Noteworthy Conditions:</b> None

Attach sketches and/or photographs, as needed.

**1. SITE COVER - SOIL, CONCRETE, ASPHALT, STRUCTURES**

**A. Visual Inspection and Observations:**

During the 11/30/2021 - 12/12/22 reporting period, Haley & Aldrich performed environmental monitoring and other services as needed under the Site Management Plan. The site cover is in place and effective at the time of inspection. There were no changes in the site cover plan.

**B. Maintenance, repairs, or changes to site cover completed since previous inspection(s):**

None related to site cover.

**C. Deficiencies noted, if any:**

None related to site cover.

**D. Recommended actions:**

None related to site engineering controls.

**2. OTHER SITE OBSERVATIONS (include any incidents, repairs, maintenance, or other observations affecting site management plan and reporting):**

DNAPL monitoring and extractions were performed three times during the reporting period.

**3. SITE / OWNER PERSONNEL CONTACTED:**

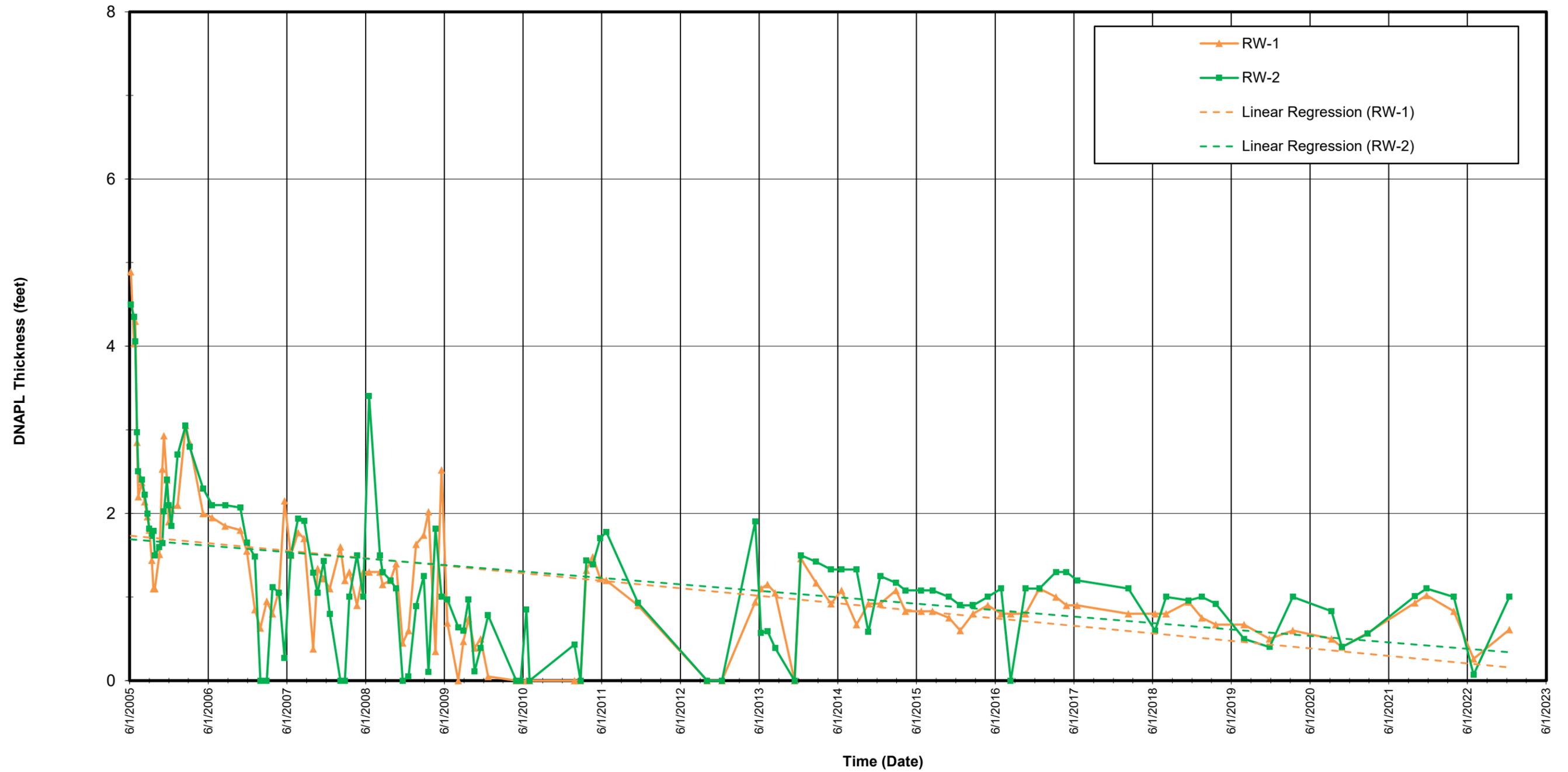
a. Michael Cooney, Ferry Landings, LLC

b. Carlos Jimenez, Ferry Landings, LLC

**APPENDIX D**

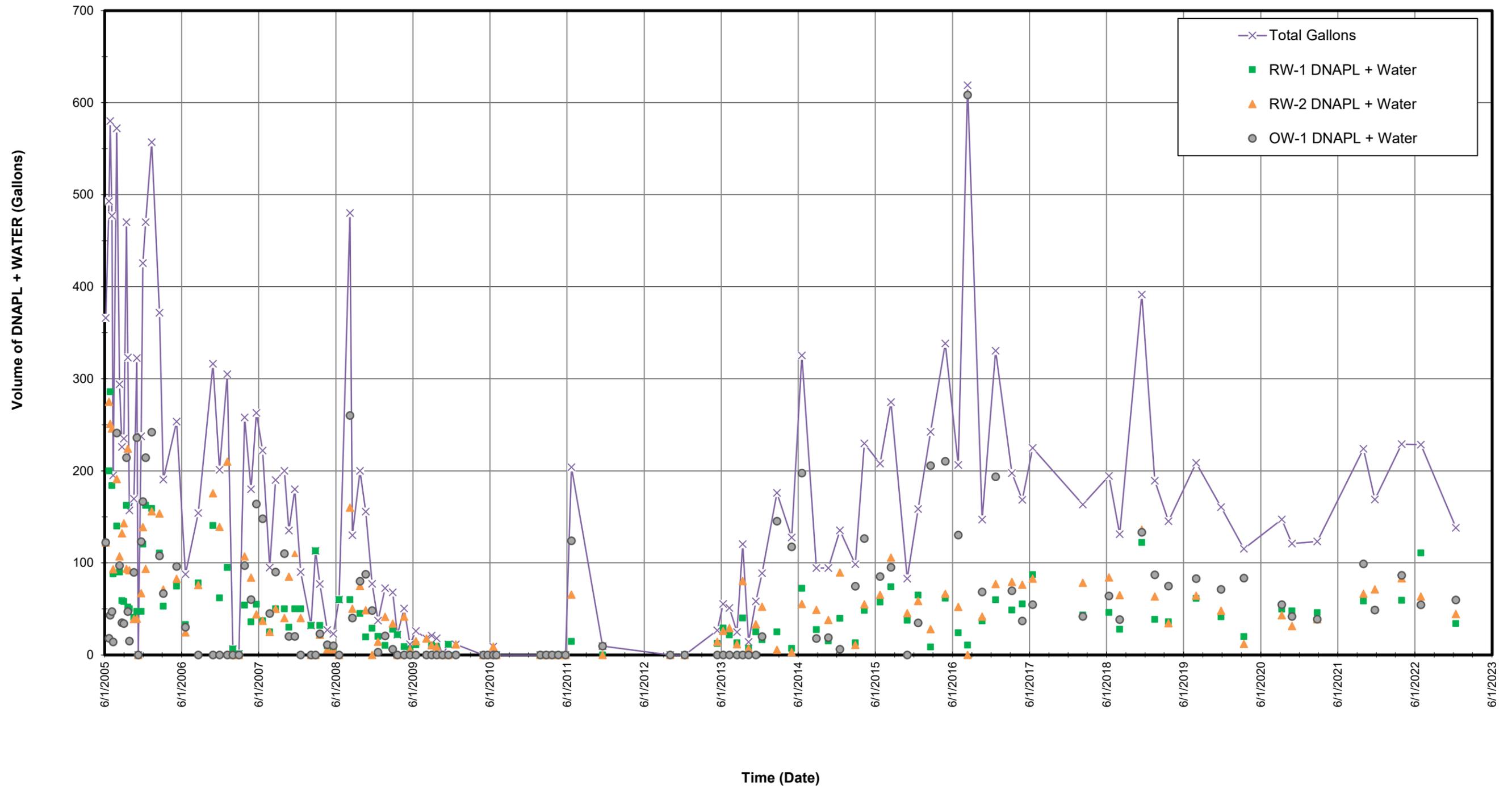
**DNAPL Monitoring and Extraction Summary**

**FIGURE 1**  
**WESTERN DNAPL RECOVERY SYSTEM**  
**DNAPL THICKNESS**

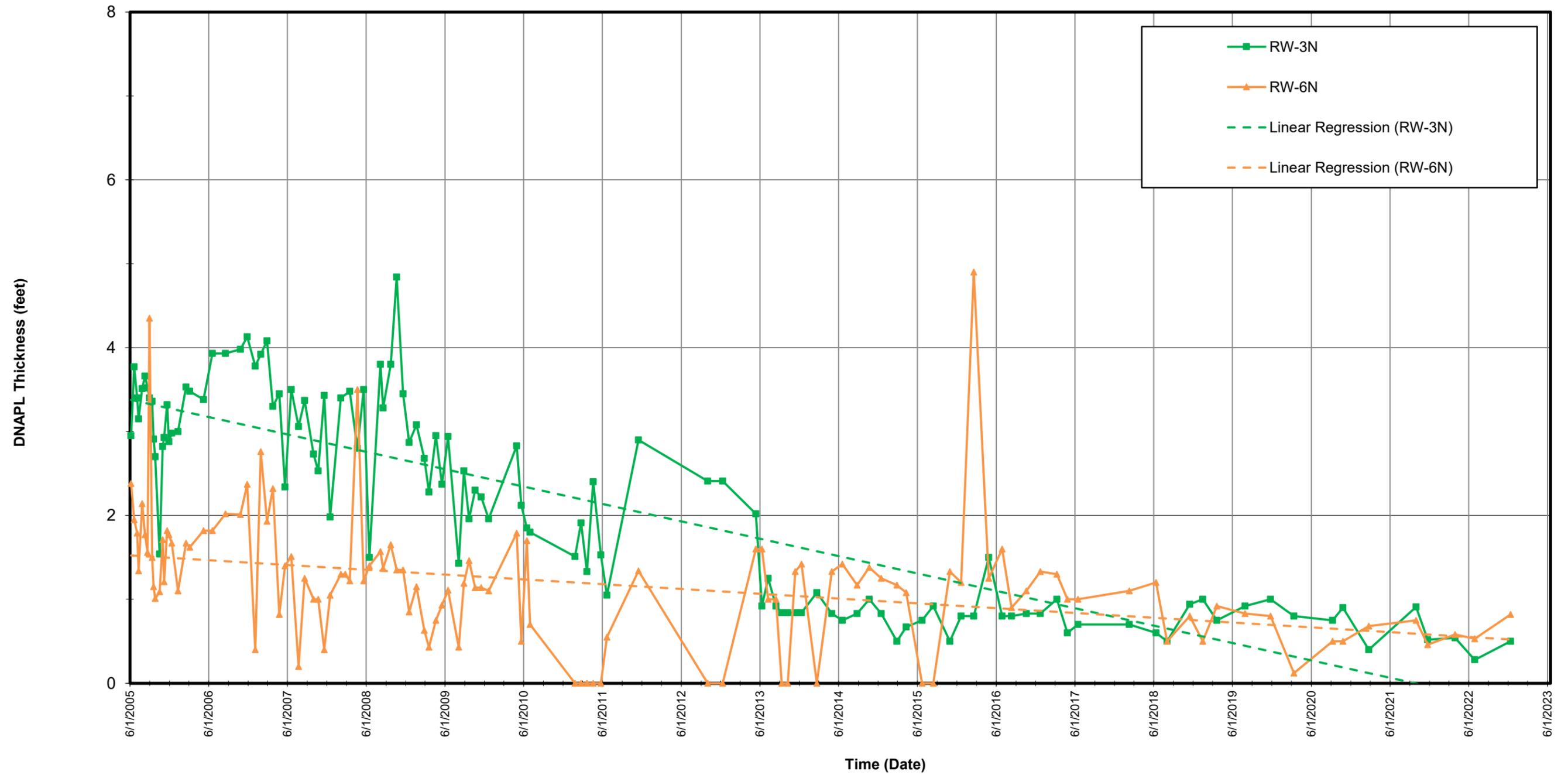


**NOTES:**  
1. Lines illustrate data trends only and should not be used to interpolate data.

**FIGURE 2  
WESTERN DNAPL RECOVERY SYSTEM  
FLUID VOLUME EXTRACTED**

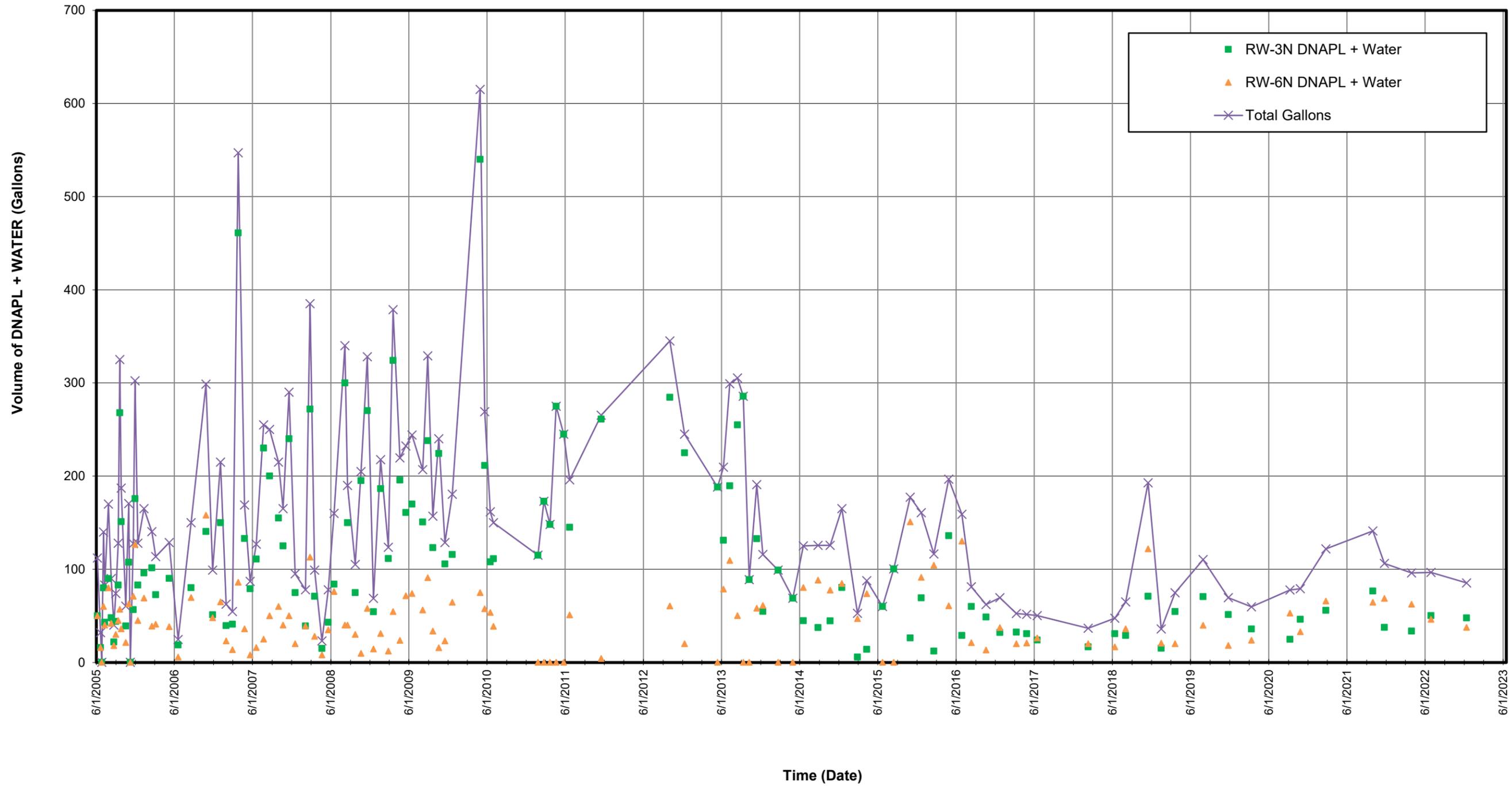


**FIGURE 3  
NORTHERN DNAPL RECOVERY SYSTEM  
DNAPL THICKNESS**



**NOTES:**  
1. Lines illustrate data trends only and should not be used to interpolate data.

**FIGURE 4**  
**NORTHERN DNAPL RECOVERY SYSTEM**  
**FLUID VOLUME EXTRACTED**







## DNAPL MONITORING REPORT

**PROJECT** Tarrytown Former MGP Site  
**LOCATION** Tarrytown, New York

Well ID#	Date	Time	Depth of Water from Stick Down*	Top of LNAPL	Top of DNAPL	Bottom of DNAPL	Thickness of DNAPL	Depth of Well	Thickness of Sediment in Bottom of Well	Read By
<b>Northern DNAPL Area</b>										
OW-1N	3/30/2022	9:20	6.85	N/A	N/A	N/A	0	22.5	0	DF/SS
RW-1N	3/30/2022	9:25	7.7	N/A	N/A	N/A	0	18.55	0	DF/SS
RW-2N	3/30/2022	8:15	6.7	N/A	N/A	N/A	0	18.05	0	DF/SS
RW-3N	3/30/2022	13:15	6	N/A	18.16	Bottom of well	0.54	18.7	0	DF/SS
RW-4N	Well decommissioned and grouted closed on 7/14/2017									
RW-5N	Well decommissioned and grouted closed on 7/14/2017									
RW-6N	3/30/2022	7:45	13	N/A	23.3	Bottom of well	0.58	23.88	0	DF/SS
OW-2N	3/30/2022	7:30	8.46	N/A	N/A	N/A	0	22.05	0	DF/SS
RW-3N	3/30/2022	14:45	6.1	N/A	18.62	Bottom of well	0.08	18.7	0	DF/SS
RW-6N	3/30/2022	14:30	15.29	N/A	23.55	Bottom of well	0.33	23.88	0	DF/SS

<b>Western DNAPL Area</b>										
OW-2	3/30/2022	9:10	8.55'	N/A	N/A	N/A	0	31.2	0	DF/SS
RW-2	3/30/2022	8:45	8.81'	N/A	27.8	Bottom of well	1	28.8	0	DF/SS
RW-1	3/30/2022	9:35	8.52'	N/A	27.17	Bottom of well	0.83	28	0	DF/SS
OW-1	3/30/2022	7:10	9.00'	N/A	27.79	Bottom of well	0.5	28.29	0	DF/SS
OW-2	3/30/2022	-	-	-	-	-	-	-	-	-
RW-2	3/30/2022	11:20	8.62'	N/A	28.38	Bottom of well	0.42	28.8	0	DF/SS
RW-1	3/30/2022	11:12	8.02'	N/A	27.75	Bottom of well	0.25	28	0	DF/SS
OW-1	3/30/2022	11:00	8.71'	N/A	27.54	Bottom of well	0.75	28.29	0	DF/SS
OW-2	3/30/2022	-	-	-	-	-	-	-	-	-
RW-2	3/30/2022	13:02	8.72'	N/A	28.63	Bottom of well	0.17	28.8	0	DF/SS
RW-1	3/30/2022	12:55	8.01'	N/A	27.96	Bottom of well	0.04	28	0	DF/SS
OW-1	3/30/2022	12:50	8.90'	N/A	28.25	Bottom of well	0.04	28.29	0	DF/SS

**REMARKS:** Criteria to note in remarks: 1. Thickness of Sediment within the well. 2. Describe any soils on the probe (color, type) 3. Note color of DNAPL on probe or tape.

\* Depth measurements taken from top of riser.

\*\* New depth of well(s) due to addition of riser installed with new manhole(s). OW-1N NEW STICK-UP = EI 9.37. RW-1N NEW STICK-UP = EI 10.07.

\*\*\* Depths of wells RW-4N, RW-5N, RW-6N and OW-2N changed recently due to riser and well head extensions.

RW-4N NEW STICK-UP = EL 11.19 (CONFIRMED 04/27/2017). RW-5N NEW STICK-UP = EL 11.23. RW-6N NEW STICK-UP = EL 11.17. OW-2N NEW STICK-UP = EL 11.15.

See Table I in Operation, Maintenance and Monitoring Plan for frequency of monitoring and inspection.

**ANNUAL INSPECTION NOTES:**






## DNAPL MONITORING REPORT

**PROJECT** Tarrytown Former MGP Site  
**LOCATION** Tarrytown, New York

Well ID#	Date	Time	Depth of Water from Stick Down*	Top of LNAPL	Top of DNAPL	Bottom of DNAPL	Thickness of DNAPL	Depth of Well	Thickness of Sediment in Bottom of Well	Read By
<b>Northern DNAPL Area</b>										
OW-1N	6/29/2022	10:20	7.8	N/A	N/A	N/A	0	22.5	0	SS
RW-1N	6/29/2022	10:13	7.88	N/A	N/A	N/A	0	18.6	0	SS
RW-2N	6/29/2022	10:07	7.56	N/A	N/A	N/A	0	18.06	0	SS
RW-3N	6/29/2022	14:00	7.21	N/A	18.65	Bottom of well	0.07	18.72	0	SS
RW-4N	1/3/1900									
RW-5N	Well decommissioned and grouted closed on 7/14/2017									
RW-6N	6/29/2022	15:05	12.26	N/A	23.75	Bottom of well	0.13	23.88	0	SS
OW-2N	6/29/2022	7:45	8.37	N/A	N/A	N/A	0	22.05	0	SS
RW-3N	6/29/2022	8:15	5.41	N/A	18.44	Bottom of well	0.28	18.72	0	SS
RW-6N	6/29/2022	7:52	8.1	N/A	23.35	Bottom of well	0.53	23.88	0	SS

<b>Western DNAPL Area</b>										
OW-2	-	-	-	-	-	-	-	-	-	SS
RW-2	6/29/2022	8:50	7.75'	N/A	27.9	Bottom of well	0.07	27.97	0	SS
RW-1	6/29/2022	8:30	7.81'	N/A	28.64	Bottom of well	0.26	28.9	0	SS
OW-1	6/29/2022	9:10	7.98'	N/A	28.49	Bottom of well	0.05	28.54	0	SS
OW-2	-	-	-	-	-	-	-	-	-	
RW-2	6/29/2022	11:35	7.48	N/A	27.9	Bottom of well	0.07	27.97	0	SS
RW-1	6/29/2022	11:30	7.9	N/A	27.15	Bottom of well	1.75	28.9	0	SS
OW-1	6/29/2022	11:40	7.66	N/A	28.49	Bottom of well	0.05	28.54	0	SS
OW-2	-	-	-	-	-	-	-	-	-	
RW-2	6/29/2022	13:30	7.50'	N/A	27.94	Bottom of well	0.03	27.97	0	SS
RW-1	6/29/2022	13:24	7.96'	N/A	27.76	Bottom of well	1.14	28.9	0	SS
OW-1	6/29/2022	13:39	7.85'	N/A	28.52	Bottom of well	0.02	28.54	0	SS

**REMARKS:** Criteria to note in remarks: 1. Thickness of Sediment within the well. 2. Describe any soils on the probe (color, type) 3. Note color of DNAPL on probe or tape.

\* Depth measurements taken from top of riser.

\*\* New depth of well(s) due to addition of riser installed with new manhole(s). OW-1N NEW STICK-UP = EI 9.37. RW-1N NEW STICK-UP = EI 10.07.

\*\*\* Depths of wells RW-4N, RW-5N, RW-6N and OW-2N changed recently due to riser and well head extensions.

RW-4N NEW STICK-UP = EL 11.19 (CONFIRMED 04/27/2017). RW-5N NEW STICK-UP = EL 11.23. RW-6N NEW STICK-UP = EL 11.17. OW-2N NEW STICK-UP = EL 11.15.

See Table I in Operation, Maintenance and Monitoring Plan for frequency of monitoring and inspection.

**ANNUAL INSPECTION NOTES:**






## DNAPL MONITORING REPORT

**PROJECT** Tarrytown Former MGP Site  
**LOCATION** Tarrytown, New York

Well ID#	Date	Time	Depth of Water from Stick Down*	Top of LNAPL	Top of DNAPL	Bottom of DNAPL	Thickness of DNAPL	Depth of Well	Thickness of Sediment in Bottom of Well	Read By
<b>Northern DNAPL Area</b>										
OW-1N	12/12/2022	8:25	6.85	N/A	N/A	N/A	0	22.5	0	SS/ZS
RW-1N	12/12/2022	8:20	7.7	N/A	N/A	N/A	0	18.55	0	SS/ZS
RW-2N	12/12/2022	8:15	6.7	N/A	N/A	N/A	0	18.05	0	SS/ZS
RW-3N	12/12/2022	8:00	4.93	N/A	18.2	Bottom of well	0.5	18.7	0	SS/ZS
RW-4N	Well decommissioned and grouted closed on 7/14/2017									
RW-5N	Well decommissioned and grouted closed on 7/14/2017									
RW-6N	12/12/2022	7:45	7.81	N/A	23.06	Bottom of well	0.82	23.88	0	SS/ZS
OW-2N	12/12/2022	7:30	8.04	N/A	N/A	N/A	0	22.05	0	SS/ZS
RW-3N	12/12/2022	12:30	5.03	N/A	18.38	Bottom of well	0.32	18.7	0	SS/ZS
RW-6N	12/12/2022	12:20	7.7	N/A	23.5	Bottom of well	0.38	23.88	0	SS/ZS

<b>Western DNAPL Area</b>										
OW-2	12/12/2022	-	-	-	-	-	-	-	-	-
RW-2	12/12/2022	8:50	8.81'	N/A	27.8	Bottom of well	1	28.8	0	SS/ZS
RW-1	12/12/2022	8:45	8.52'	N/A	27.39	Bottom of well	0.61	28	0	SS/ZS
OW-1	12/12/2022	8:40	9.00'	N/A	28.11	Bottom of well	0.18	28.29	0	SS/ZS
OW-2	12/12/2022	-	-	-	-	-	-	-	-	-
RW-2	12/12/2022	11:30	8.62'	N/A	N/A	Bottom of well	0	28.8	0	SS/ZS
RW-1	12/12/2022	11:25	8.02'	N/A	27.87	Bottom of well	0.13	28	0	SS/ZS
OW-1	12/12/2022	11:20	8.71'	N/A	27.06	Bottom of well	1.23	28.29	0	SS/ZS
OW-2	12/12/2022	-	-	-	-	-	-	-	-	-

**REMARKS:** Criteria to note in remarks: 1. Thickness of Sediment within the well. 2. Describe any soils on the probe (color, type) 3. Note color of DNAPL on probe or tape.

\* Depth measurements taken from top of riser.

\*\* New depth of well(s) due to addition of riser installed with new manhole(s). OW-1N NEW STICK-UP = EI 9.37. RW-1N NEW STICK-UP = EI 10.07.

\*\*\* Depths of wells RW-4N, RW-5N, RW-6N and OW-2N changed recently due to riser and well head extensions.

RW-4N NEW STICK-UP = EL 11.19 (CONFIRMED 04/27/2017). RW-5N NEW STICK-UP = EL 11.23. RW-6N NEW STICK-UP = EL 11.17. OW-2N NEW STICK-UP = EL 11.15.

See Table I in Operation, Maintenance and Monitoring Plan for frequency of monitoring and inspection.

**ANNUAL INSPECTION NOTES:**

**SHIPPING DOCUMENT**

IN THE EVENT OF AN EMERGENCY CALL \*\*24-Hr-Number\*\* 1-800-488-1760 (SAFETY - KLEEN SYSTEMS, INC.)

REFERENCE NBR.  
88536486 - 2107822350

CUSTOMER / GENERATOR: FE18257 Ferry Landings Llc  
129 Main Street  
Tarrytown NY 10591 - 0000  
PHONE: 203 - 661 - 0056

GENERATOR USEPA ID.

GENERATOR STATE:

MANIFEST#: FORM CD : NR SHIP# 236579413

TRANSPORTER 1 TXR000081205 SAFETY - KLEEN SYSTEMS INC.

TRANSPORTER 2

US DOT DESCRIPTION (INCLUDING PROPER SHIPPING NAME, HAZARD CLASS, AND ID)

OILY WATER

(NOT USDOT OR USEPA REGULATED)(VAC)

FEDERAL WASTE CODES NONE

STATE WASTE CODES

TOTAL CONT 1 TYPE: TT WT/VOL G SKDOT 7008471

CNT# 220309084719 SZ: BULK VOLUME CONTAINER QTY: 325 PROF# 150451

DESIGNATED FACILITY NAME/ADDRESS:

ENVIRO WASTE OIL RECOVERY LLC

279 RTE 6

MAHOPAC

NY 10541

T8D PHONE: 845-279-0263

FACILITY USEPA ID NO NYD044825636

FACILITY STATE ID NO

GENERATOR STATUS CESQG: Vehicle

CUSTOMER / GENERATOR: Mike

TRANSPORTER: Delahanty, Richard B


TRANSPORTER 2:



