NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
**Site Classification Report**

DATE: 2/4/2013

**Site Code:** 360010 **Site Name:** Harmon Railroad Yard - Waste Water Area
**City:** CROTON-ON-HUDSON **Town:** Cortlandt
**Region:** 3 **County:** Westchester
**Current Classification:** 02 **Proposed Classification:** 04
**Estimated Size (acres):** 5.00 **Disposal Area:** Lagoon
**Significant Threat:** Previously **Site Type:**
**Priority ranking Score:** **Project Manager:** David Chiusano

**Summary of Approvals**

**Originator/Supervisor:** Gerard Burke **11/16/2012**

**RHWRE:** : **11/16/2012**

**BEEI of NYSDOH:** **12/17/2012**

**CO Bureau Director:** Michael Cruden, Director, Remedial Bureau E: **12/17/2012**

**01/11/2013**

**Assistant Division Director:** Michael J. Ryan, P.E.:

**Basis for Classification Change**

Threats from the disposal of hazardous waste at this site were addressed by the implementation of the remedy identified for the site by the September 1992 Record of Decision (ROD) for Operable Unit (OU)No. 1 and the March 1998 ROD for OU No.2.

All construction of the components of the site-wide remedy for OU No.1 was completed in 1996 and in 2002 for OU No.2. The OU No. 1 Closure Report dated July 1999 prepared by Environmental Resources Management confirms that the OU No.1 remedy has been constructed consistent with the requirements in the OU No.1 ROD. Similarly, The OU No. 2 Closure Report dated July 2002 prepared by Environmental Resources Management confirms that the OU No.2 remedy has been constructed consistent with the requirements in the OU No.2 ROD. Both closure reports are in eDocs.

Management of contamination remaining at the site, including any required monitoring, is and has been controlled pursuant to a Site Management Plan (SMP). A copy of the SMP is in eDocs. Institutional controls were required to ensure the protectiveness of the site. The required controls, in the form of a deed restriction is in place. A significant threat to public health and the environment no longer exists at the site. The site is properly remediated and requires site management, therefore, it qualifies for Class 4 status on the Registry of Inactive Hazardous Waste disposal sites.

DATE: 2/4/2013

**Site Code:** 360010 **Site Name:** Harmon Railroad Yard - Waste Water Area

**Site Description - Last Review: 01/29/2013**

LOCATION: The Harmon Railroad Yard – Waste Water Area site (the site) is located in the northwest portion of the Harmon Railroad Yard, which is in a suburban area of the Village of Croton-on-Hudson, Town of Cortlandt, County of Westchester, New York.

SITE FEATURES: The main site feature is the former wastewater lagoon area, which was closed and capped as part of the remedial activities conducted at this site. Currently, the lagoon area is covered with asphalt pavement. The portion of the site that surrounds the capped former wastewater lagoon to the southwest, south and southeast is grass-cover land that slopes downward away from the former lagoon. The remaining portion of the site typically contains gravel and asphalt covered ground that is generally comparable in elevation to the capped former wastewater lagoon. Several mid-size buildings and several trailer/sheds are located on the site northeast of the former lagoon.

CURRENT ZONING/USE: Currently, the Harmon Railroad Yard, including the site, is zoned as LI (Light Industrial). Metro North Railroad (MNR) presently uses the site primarily for above grade material storage, employee parking and storage of MNR equipment. The access to the site is restricted to MNR employees or authorized representatives. A wastewater treatment plant that formerly operated at the site has been decommissioned and is no longer in use, but the buildings remain. Surrounding land use includes a closed solid waste landfill to the south, a residential development to the north, an access road to the residential development to the west with the Hudson River beyond and the remainder of the Hudson Railroad Yard to the east.

HISTORICAL USE: In 1980, PCBs were discovered in the effluent discharge from the old treatment plant. This treatment plant was decommissioned prior to the construction of a new treatment in 1985. The source of the PCBs was identified as one of the maintenance areas within the treatment plant where train transformers were serviced by Conrail and/or Penn Central. Conrail operated the Harmon Railroad Yard from 1976 through 1982; Penn Central operated the yard prior to 1976.

Part of the maintenance operation would be to drain the PCB oil, and rinse the transformer. Discharges from this operation went into the wastewater lagoon, which resulted in the release of PCBs into the lagoon, surrounding soil and the groundwater. Since the previous treatment process was not capable of removing PCBs, the old treatment plant, and its appurtenances also became contaminated with PCBs. In 1985 the NYSDEC placed the Harmon Railroad Yard – Waste Water Area site on the State Registry of Inactive Hazardous Waste Disposal Sites due to the presence of PCBs. In August 1984, MNR signed a Stipulation of Discontinuance for remediation of the site. As part of the remediation process, MNR constructed the new wastewater treatment plant in 1985, and dismantled and decommissioned the old treatment plant. Subsequently, studies were conducted to characterize the nature and extent of contamination within and surrounding the former wastewater lagoon, and to develop/implement appropriate remedial activities.

OPERABLE UNITS: The Harmon Railroad Yard, Wastewater Lagoon site is divided into two operable units. An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of release or exposure pathway resulting from the on-site contamination. Operable Unit I included the former wastewater lagoon and Operable Unit II included four areas of non-aqueous phase liquid (NAPL) or floating product on the groundwater surface that were encountered in areas surrounding OU-I.

DATE: 2/4/2013

**Site Code:** 360010 **Site Name:** Harmon Railroad Yard - Waste Water Area

SITE GEOLOGY AND HYDROGEOLOGY: The Site is located on the northwestern edge of the Croton Point peninsula. Historic sand hills up to 60 feet high once occupied the peninsula. These hills were removed over time by mining operations and to prepare Harmon Yard for railroad operations.

During the Remedial Investigations (RI) completed for OU-I and OU-II, the soil encountered during drilling activities was uniform across the site consisting primarily of brown very fine to coarse sand and gravel. Bedrock was not encountered in any of the test borings advanced during the RI. Test borings extended to a maximum depth of approximately 16 feet below grade, and based on previous test borings conducted at Harmon Yard, the depth to bedrock is thought to exceed 200 feet in the vicinity of the site. Prior to the closure activities conducted at OU-I, groundwater reportedly flowed radially outward from the wastewater lagoon. Subsequent to closure of the lagoon, groundwater in OU-II was determined to flow generally to the northwest. The depth to groundwater at the site ranges from approximately 7 feet below ground surface (bgs) to 16 feet bgs.

Remediation is complete. Project is in Site Management.

| **Contaminants of Concern (Including Materials Disposed)** | **Quantity Disposed** |
|---|---|
| **OU 01** | |
| POLYCHLORINATED BIPHENYLS (PCB) | 0.00 |
| POLYCHLORINATED BIPHENYLS (PCB) | 0.00 |
| CHLOROBENZENE | |
| **OU 01A** | |
| POLYCHLORINATED BIPHENYLS (PCB) | |
| CHLOROBENZENE | |
| **OU 02** | |
| CHLOROBENZENE | |
| POLYCHLORINATED BIPHENYLS (PCB) | |

**Analytical Data Available for :** Groundwater, Surface Water, Soil, Sediment

**Applicable Standards Exceeded for:** Groundwater, Soil

**Site Environmental Assessment- Last Review: 01/29/2013**

OPERABLE UNIT I - FORMER WASTEWATER LAGOON

Prior to remediation the lagoon was estimated to contain approximately 3,757 tons of sludge of which 214 tons was estimated to contained PCB of concentrations in excess of 500 parts per million (ppm) and 1,153 tons with PCB concentrations ranging between 50 and 500 ppm. The remaining sludge had concentrations less than 50 ppm.

An estimated 3,750 tons of surface soil (i.e., extending to a depth of 2 feet bgs) around the perimeter of the lagoon contained PCB concentrations in excess of the approved cleanup level of 0.5 ppm and 5,100 tons of subsurface soil contained PCB concentrations in excess of 10 ppm.

Subsequent to remediation media containing PCB concentrations in excess of 10 ppm was removed and

transported off-site for disposal and soil containing PCB concentrations of 10 ppm or less was placed within the geomembrane-lined containment cell constructed within OU-I.

OPERABLE UNIT II – NAPL AREAS:

Prior to remediation 4 areas containing NAPL (designated NAPL area L1 through NAPL area L4) were identified around the perimeter of OU-I, and these areas comprise OU-II. The NAPL present in these areas generally consisted of thick viscous, severely biodegraded diesel fuel containing varying concentrations of PCBs. The average NAPL thicknesses and maximum PCB concentrations were measured in NAPL area L1 at 2.5 feet and 7.2 ppm, NAPL area L2 at 1.35 feet and 19 ppm, NAPL area L3 at 1.3 feet and 3.6 ppm, and NAPL area L4 at 3.7 feet and 119 ppm.

Based upon recent measurements, the remedial actions implemented in OU-II have reduced the NAPL present in each of the NAPL areas. In March 2010, average NAPL thicknesses were measured in NAPL area L1 at 0.02 feet, NAPL area L2 at 0.18 feet, NAPL area L3 at 0.07 feet, and NAPL area L4 at 0.19 feet. Since 2004, PCB concentrations in samples of NAPL tested have not exceeded 50 ppm, which is a concentration that would deem the NAPL as a hazardous waste. Remedial efforts are on going to remove NAPL to the extent possible from OU-II.

SPECIAL RESOURCES IMPACTED/THREATENED:

Studies conducted as part of the Remedial Investigation for OU-I and OU-II did not identify evidence of PCB-impact to the Hudson River, which is located approximately 400 feet to the east of the site.

## Site Health Assessment - Last Update: 11/16/2012

Since the site is fenced and covered by asphalt or clean backfill, people will not come in contact with site-related contaminated soils unless they dig below the surface materials. Contaminated groundwater at the site is not used for drinking or other purposes and the area is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the soil or groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site development. Soil vapor intrusion is not a concern for off-site buildings.

| | Start | | End | |
|---|---|---|---|---|
| **OU 00** | | | | |
| OGC Docket - Deed Restriction | 5/9/11 | ACT | 8/31/12 | ACT |
| Periodic Review | 11/16/12 | ACT | 1/28/13 | ACT |
| Periodic Review | 1/31/16 | PLN | 3/16/16 | PLN |
| Site Management | 1/1/02 | ACT | 1/2/32 | PLN |
| **OU 01** | | | | |
| Reclass Pkg. | 8/24/12 | ACT | 2/4/13 | ACT |
| Remedial Action | 1/1/95 | ACT | 5/1/96 | ACT |
| Remedial Design | 9/1/93 | ACT | 10/1/94 | ACT |

DATE: 2/4/2013

**Site Code:** 360010 **Site Name:** Harmon Railroad Yard - Waste Water Area

| | | | | |
|---|---|---|---|---|
| Remedial Investigation | 4/1/89 | ACT | 9/1/92 | ACT |
| **OU 01A** | | | | |
| Remedial Action | 12/1/90 | ACT | 1/1/91 | ACT |
| **OU 02** | | | | |
| Remedial Action | 4/2/01 | ACT | 8/2/02 | ACT |
| Remedial Design | 3/1/98 | ACT | 10/20/00 | ACT |
| Remedial Investigation | 3/1/94 | ACT | 3/1/98 | ACT |

## Remedy Description and Cost

**Remedy Description for Operable Unit 01**

The selected remedy includes the following: 1) Incineration of the PCB contaminated lagoon sludge at an off-site TSCA permitted incinerator;
2) Disposal of PCB contaminated soil greater that 10 ppm at an off-site landfill; 3) Placement of a clay liner over the lagoon; excavate and place and consolidate low level PCB contaminated surficial soil in the remediated lagoon.Place a clay cap over the remediated lagoon.

**Total Cost** $14,690,000

DATE: 2/4/2013

**Site Code:** 360010 **Site Name:** Harmon Railroad Yard - Waste Water Area

**Remedy Description for Operable Unit 01A**

Two IRM s were implemented. The first one involved the recovery and disposal of PCB contaminated LNAPL from three onsite monitoring wells and the second one involving the cleanup of the sludge in the lagoon and the soil surrounding it.

**Total Cost** $14,700,000

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
**Site Classification Report**

DATE: 2/4/2013

**Site Code:** 360010 **Site Name:** Harmon Railroad Yard - Waste Water Area

**Remedy Description for Operable Unit 02**

The remedy includes: Vacuum enhanced NAPL recovery of PCB bearing NAPL adjacent to the former wastewater lagoon. Liquid phase NAPL to be disposed of at a TSCA/RCRA permitted incinerator. This alternative also includes long term groundwater and NAPL monitoring.

**Total Cost** $1,381,782

**OU** 00 **Site Management Plan Approval: 01/01/2002** **Status: ACT**

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**
**Site Management Form**
2/4/2013

**SITE DESCRIPTION**

**SITE NO. 360010**

**SITE NAME Harmon Railroad Yard - Waste Water Area**

SITE ADDRESS: Croton Point Road ZIP CODE: 10519

CITY/TOWN: Croton-On-Hudson

COUNTY: Westchester

ALLOWABLE USE: Industrial

**SITE MANAGEMENT DESCRIPTION**

| SITE MANAGEMENT PLAN INCLUDES: | YES | NO |
|---|---|---|
| IC/EC Certification Plan | ▣ | ☐ |
| Monitoring Plan | ▣ | ☐ |
| Operation and Maintenance (O&M) Plan | ▣ | ☐ |

Periodic Review Frequency: every three years

Periodic Review Report Submittal Date: 01/31/2016

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
**Site Classification Report**

DATE: 2/4/2013

**Site Code:** 360010 **Site Name:** Harmon Railroad Yard - Waste Water Area

**Description of Institutional Control**

**Midtown Tracking Ventures, LLC**
551 Fifth Avenue, 34th Floor
**1 Croton Point Avenue**
Deed Restriction
Block: 2
Lot: 2
Sublot:
Section: 78.2
Subsection:
S_B_L Image: 78.2-2-2
Building Use Restriction
Ground Water Use Restriction
IC/EC Plan
Landuse Restriction
Monitoring Plan
O&M Plan
Site Management Plan
Soil Management Plan

**Description of Engineering Control**

**Midtown Tracking Ventures, LLC**
551 Fifth Avenue, 34th Floor
**1 Croton Point Avenue**
Deed Restriction - Institutional Control Instrument
Block: 2
Lot: 2
Sublot:
Section: 78.2
Subsection:
S_B_L Image: 78.2-2-2
Cover System
Groundwater Containment
Leachate Collection
Subsurface Barriers
Fencing/Access Control

NEW YORK
state department of
HEALTH

Nirav R. Shah, M.D., M.P.H.
Commissioner

Sue Kelly
Executive Deputy Commissioner

December 17, 2012

Mr. Michael Cruden
Division of Environmental Remediation
NYS Dept. of Environmental Conservation
625 Broadway
Albany, NY 12233

Re: **Site Reclassification**
Harmon Railroad Yard – Waste Water Area
Site #360010
Croton-on-Hudson (V), Westchester County

Dear Mr. Cruden:

Per your request, staff reviewed the *Site Classification Package* for the referenced site. Based on that review, I understand the site was divided into two operable units (OUs): OU-1 being the former wastewater lagoon and OU-2 being areas where non-aqueous phase liquid (NAPL) was detected outside of the lagoon. Remediation of OU-1 included removal and off-site disposal of sludge within the former lagoon that contained polychlorinated biphenyls (PCBs) in excess of 50 ppm and removal and off-site disposal of soils adjacent to the lagoon with concentrations of PCBs in excess of 10 ppm. Soils with PCB concentrations less than 10 ppm were placed in the geotextile-lined containment cell created within the former lagoon and capped. Remediation of OU-2 included installation of a series of wells to support vacuum-enhanced recovery of NAPL.

A site management plan has been implemented and enforced via a deed restriction for long-term management and monitoring of residual contamination remaining on-site. The plan requires the restriction of site use to industrial uses; biannual and annual groundwater monitoring, as specified; maintenance of the cover system; an evaluation of the potential for soil vapor intrusion into any new structures built on the site; and, implementation of actions to reduce exposures via soil vapor intrusion, if necessary. The plan also restricts the withdrawal of new sources of groundwater without appropriate treatment.

Based on this information, I concur with the proposal to change the site classification from a Class 2 to a Class 4 (requires continued site management). If you have any questions, please call Ms. Charlotte Bethoney or me at (518) 402-7860.

Sincerely,

Krista M. Anders

Krista M. Anders, Acting Director
Bureau of Environmental Exposure Investigation

ec: A. Salame-Alfie, Ph.D.
C. Bethoney / K. Kulow / e-File
B. Devine – NYSDOH MDO
R. Morrisey – WCHD
M. Ryan / K. Lewandowski / G. Burke / D. Chuisano – NYSDEC Central Office
E. Moore – NYSDEC Region 3

P:\Bureau\Sites\Region_3\WESTCHESTER\360010\Class Pkg\Reclass_DOHConcur_121712_360010.pdf

Hudson River

Harmon Yard
Operable Unit II Site

Harmon Yard
Operable Unit I Site

Harmon Railroad Yard

Croton Point Avenue

N

Loco. Shop

Coach Shop

Equipment Maintenance Facility Bldg. #6

SITE PLAN
1" = 400'

0' 400' 800' 1200'

LEGEND:

Approximate Boundary Of Operable Unit I

Approximate Boundary Of Operable Unit II

Railroad Tracks

| | |
|---|---|
| FIELD VERIFIED BY | ADL |
| DATE | 10-2011 |
| DRAWN BY | RJM |
| DATE DRAWN | 10-27-2011 |
| SCALE | As Noted |
| DATE ISSUED | 10-27-2011 |

day
DAY ENGINEERING, P.C.
ENVIRONMENTAL ENGINEERING CONSULTANTS
ROCHESTER, NEW YORK 14606
NEW YORK, NEW YORK 10016-0710

PROJECT TITLE
METRO-NORTH RAILROAD
HARMON YARD OPERABLE UNITS OU-I AND OU-II
CROTON-ON-HUDSON, NEW YORK
SITE MANAGEMENT PLAN

DRAWING TITLE
Harmon Railroad Yard Site Plan

PROJECT NO.
10-3231M (46)

**FIGURE 2**

Ref1: OU-II Base Map Oct 2011.dwg
Ref2:
Ref3:

Xerox432AnsiB-2; 11 x 17
Layout Name: Layout1
2011.dwg Setting File: 800psFullcolor.ctb

Time Plotted: Friday, October 28, 2011 12:37:05 PM
File Name: P:\Drawings\Metro\Harmon\Remediation-46\Harmon OU-II Location Map Oct 2011.dwg

NEW YORK
state department of
HEALTH

Nirav R. Shah, M.D., M.P.H.
Commissioner

Sue Kelly
Executive Deputy Commissioner

November 15, 2012

Mr. David J. Chiusano
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway – 12th Floor
Albany, NY 12233-7017

Re: Site Management Plan
Metro-North Railroad
Harmon Railroad Yard
Site #360010
Croton-On-Hudson (V), Westchester County

Dear Mr. Chiusano,

I have reviewed the November 2012 Final Site Management Plan (SMP) for the above-referenced site. Based on that review, I understand that the SMP for the site includes institutional and engineering controls necessary to address residual contamination that remains in site soils and groundwater will provide for proper management of the site to ensure the protection of public health.

Engineering controls in the form of a fence, a subsurface sheeting wall around the former lagoon and at the western perimeter of nonaqueous phase liquid (NAPL) Area 1, a site cover system, and a NAPL recovery/monitoring well network are in place to minimize the potential for contact with residual contaminants in soil. Institutional controls in the form of an environmental easement on the property will ensure that the engineering controls are maintained. Use and development of the site will be restricted to commercial use which allows for commercial and industrial uses. In addition, the potential for soil vapor intrusion must be evaluated for any buildings developed on the Site, and any potential impacts that are identified must be mitigated. Use of groundwater as a source of potable or process water is restricted without necessary treatment. Finally, the property owner will be required to comply with the approved site management plan and provide periodic certification to the New York State Department of Environmental Conservation that the controls remain in place and continue to be effective.

Based on this information, I believe that the Site Management Plan is protective of human health. If you have any questions, please contact me at (607) 432-3911.

Sincerely,

Kristin Kulow

Kristin Kulow
Public Health Specialist II
Bureau of Environmental Exposure Investigation

ec: K. Anders, Ph.D./C. Bethoney/File
B. Devine – MDO
R. Morrisey– WCHD
M. Ryan/G. Burke – NYSDEC, Albany
E. Moore - NYSDEC, Reg. 3

**New York State Department of Environmental Conservation**
**Division of Environmental Remediation**
**Bureau of Technical Support, 11th Floor**
625 Broadway, Albany, NY 12233-7020
**Phone: (518) 402-9543 • Fax: (518) 402-9547**
**Website:** www.dec.ny.gov

Joe Martens
Commissioner

January 14, 2013

Midtown Tracking Ventures, LLC
551 Fifth Avenue, 34th Floor
New York, NY 10176

Dear Sir/Madam:

As mandated by Section 27-1305 of the Environmental Conservation Law (ECL), the New York State Department of Environmental Conservation (Department) must maintain a Registry of all inactive disposal sites suspected or known to contain hazardous waste. The ECL also mandates that this Department notify the owner of all or any part of each site or area included in the Registry of Inactive Hazardous Waste Disposal Sites as to changes in site classification.

Our records indicate that you are the owner or part owner of the site listed below. Therefore, this letter constitutes notification of change in the classification of such site in the Registry of Inactive Hazardous Waste Disposal Sites in New York State.

**DEC Site No.:** 360010
**Site Name:** Harmon Railroad Yard-Waste Water Area
**Site Address:** Croton Point Road, Croton-on-Hudson 10519

Classification change from Class 2 to Class 4

The reason for the change is as follows:

Remediation of OU-1 included removal and off-site disposal of sludge within the former lagoon that contained polychlorinated biphenyls (PCBs) in excess of 50 parts per million (ppm) and removal and off-site disposal of soils adjacent to the lagoon with concentrations of PCBs in excess of 10 ppm. Soils with PCB concentrations less than 10 ppm were placed in the geotextile-lined containment cell created within the former lagoon and covered. Remediation of OU-2 included installation of a series of wells to support vacuum-enhanced recovery of NAPL.

A site management plan has been implemented and is being enforced via a deed restriction for long-term management and monitoring of residual contamination remaining on site. The plan requires the restriction of site use to industrial uses; groundwater sampling and monitoring, as specified; maintenance of the cover system; an evaluation of the potential for soil vapor intrusion within any new structures built on the site; and, implementation of actions to reduce exposures via soil vapor intrusion, if necessary. The plan also restricts the withdrawal of new sources of groundwater without appropriate treatment.

The site is properly remediated and requires site management; therefore, it qualifies for Class 4 status on the Registry of Inactive Hazardous Waste disposal sites.

Enclosed is a copy of the Department's Inactive Hazardous Waste Disposal Site Report form as it appears in the Registry. An explanation of the site classifications is available at http://www.dec.ny.gov/chemical/8663.html. The Law allows the owner and/or operator of a site listed in the Registry to petition the Commissioner of the New York State Department of Environmental Conservation for deletion of such site, modification of site classification, or modification of any information regarding such site, by submitting a written statement setting forth the grounds of the petition.

Such petition may be addressed to:

Honorable Joseph J. Martens
Commissioner
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-1010

For additional information, please contact David Chiusano, the project manager at 518-402-9814.

Sincerely,

Kelly A. Lewandowski, P.E.
Chief
Site Control Section

KAL/BW/ss
Enclosure

ec: R. Schick
D. Finlayson
L. Zeppatelli
A. English
K. Lewandowski
D. Chiusano
J. Reilly, Metro North Railroad

bec: w/Enc.
K. Anders, NYSDOH
M. Cruden, Director, Remedial Bureau E
G. Heitzman, Acting Director, Remedial Bureau C
J. Parker, Regional Attorney, Region 3
D. Whitehead, Acting Regional Permit Administrator, Region 3
E. Moore, RHWRE, Region 3
B. Wolosen, Site Control Section

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
**Inactive Hazardous Waste Disposal Report**

| | | | | | |
|---|---|---|---|---|---|
| **Site Code** | 360010 | | | | |
| **Site Name** | Harmon Railroad Yard - Waste Water Area | **Address** | Croton Point Road | | |
| **Classification** | 04 | **City** | CROTON-ON-HUDSON | **Zip** | 10519 |
| **Region** | 3 | **County** | Westchester | **Town** | Cortlandt |
| **Latitude** | 41 degrees, 11 minutes, 30.46 seconds | | | **Estimated Size** | 5.0000 |
| **Longitude** | -73 degrees, 53 minutes, 18.18 seconds | | | | |
| **Site Type** | | **Disposal Area** | Lagoon | | |

## Site Description

LOCATION: The Harmon Railroad Yard – Waste Water Area site (the site) is located in the northwest portion of the Harmon Railroad Yard, which is in a suburban area of the Village of Croton-on-Hudson, Town of Cortlandt, County of Westchester, New York.

SITE FEATURES: The main site feature is the former wastewater lagoon area, which was closed and capped as part of the remedial activities conducted at this site. Currently, the lagoon area is covered with asphalt pavement. The portion of the site that surrounds the capped former wastewater lagoon to the southwest, south and southeast is grass-cover land that slopes downward away from the former lagoon. The remaining portion of the site typically contains gravel and asphalt covered ground that is generally comparable in elevation to the capped former wastewater lagoon. Several mid-size buildings and several trailer/sheds are located on the site northeast of the former lagoon.

CURRENT ZONING/USE: Currently, the Harmon Railroad Yard, including the site, is zoned as LI (Light Industrial). Metro North Railroad (MNR) presently uses the site primarily for above grade material storage, employee parking and storage of MNR equipment. The access to the site is restricted to MNR employees or authorized representatives. A wastewater treatment plant that formerly operated at the site has been decommissioned and is no longer in use, but the buildings remain. Surrounding land use includes a closed solid waste landfill to the south, a residential development to the north, an access road to the residential development to the west with the Hudson River beyond and the remainder of the Hudson Railroad Yard to the east.

HISTORICAL USE: In 1980, PCBs were discovered in the effluent discharge from the old treatment plant. This treatment plant was decommissioned prior to the construction of a new treatment in 1985. The source of the PCBs was identified as one of the maintenance areas within the treatment plant where train transformers were serviced by Conrail and/or Penn Central. Conrail operated the Harmon Railroad Yard from 1976 through 1982; Penn Central operated the yard prior to 1976.

Part of the maintenance operation would be to drain the PCB oil, and rinse the transformer. Discharges from this operation went into the wastewater lagoon, which resulted in the release of PCBs into the lagoon, surrounding soil and the groundwater. Since the previous treatment process was not capable of removing PCBs, the old treatment plant, and its appurtenances also became contaminated with PCBs. In 1985 the NYSDEC placed the Harmon Railroad Yard – Waste Water Area site on the State Registry of Inactive Hazardous Waste Disposal Sites due to the presence of PCBs. In August 1984, MNR signed a Stipulation of Discontinuance for remediation of the site. As part of the remediation process, MNR constructed the new wastewater treatment plant in 1985, and dismantled and decommissioned the old treatment plant. Subsequently, studies were conducted to characterize the nature and extent of contamination within and surrounding the former wastewater lagoon, and to develop/implement appropriate remedial activities.

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During the Remedial Investigations (RI) completed for OU-I and OU-II, the soil encountered during drilling activities was uniform across the site consisting primarily of brown very fine to coarse sand and gravel. Bedrock was not encountered in any of the test borings advanced during the RI. Test borings extended to a maximum depth of approximately 16 feet below grade, and based on

previous test borings conducted at Harmon Yard, the depth to bedrock is thought to exceed 200 feet in the vicinity of the site. Prior to the closure activities conducted at OU-I, groundwater reportedly flowed radially outward from the wastewater lagoon. Subsequent to closure of the lagoon, groundwater in OU-II was determined to flow generally to the northwest. The depth to groundwater at the site ranges from approximately 7 feet below ground surface (bgs) to 16 feet bgs.

Remediation is complete. Project is in Site Management.

## Contaminants of Concern (Including Materials Disposed) Quantity

**OU 01**

| | |
|---|---|
| POLYCHLORINATED BIPHENYLS (PCB) | 0.00 |
| POLYCHLORINATED BIPHENYLS (PCB) | 0.00 |
| CHLOROBENZENE | |

**OU 01A**

POLYCHLORINATED BIPHENYLS (PCB)

CHLOROBENZENE

**OU 02**

CHLOROBENZENE

POLYCHLORINATED BIPHENYLS (PCB)

**Analytical Data Available for :** Groundwater, Surface Water, Soil, Sediment

**Applicable Standards Exceeded for:** Groundwater, Soil

## Site Environmental Assessment

OPERABLE UNIT I - FORMER WASTEWATER LAGOON

Prior to remediation the lagoon was estimated to contain approximately 3,757 tons of sludge of which 214 tons was estimated to contained PCB of concentrations in excess of 500 parts per million (ppm) and 1,153 tons with PCB concentrations ranging between 50 and 500 ppm. The remaining sludge had concentrations less than 50 ppm.

An estimated 3,750 tons of surface soil (i.e., extending to a depth of 2 feet bgs) around the perimeter of the lagoon contained PCB concentrations in excess of the approved cleanup level of 0.5 ppm and 5,100 tons of subsurface soil contained PCB concentrations in excess of 10 ppm.

Subsequent to remediation media containing PCB concentrations in excess of 10 ppm was removed and transported off-site for disposal and soil containing PCB concentrations of 10 ppm or less was placed within the geomembrane-lined containment cell constructed within OU-I.

OPERABLE UNIT II – NAPL AREAS:

Prior to remediation 4 areas containing NAPL (designated NAPL area L1 through NAPL area L4) were identified around the perimeter of OU-I, and these areas comprise OU-II. The NAPL present in these areas generally consisted of thick viscous, severely biodegraded diesel fuel containing varying concentrations of PCBs. The average NAPL thicknesses and maximum PCB concentrations were measured in NAPL area L1 at 2.5 feet and 7.2 ppm, NAPL area L2 at 1.35 feet and 19 ppm, NAPL area L3 at 1.3 feet and 3.6 ppm, and NAPL area L4 at 3.7 feet and 119 ppm.

Based upon recent measurements, the remedial actions implemented in OU-II have reduced the NAPL present in each of the NAPL areas. In March 2010, average NAPL thicknesses were measured in NAPL area L1 at 0.02 feet, NAPL area L2 at 0.18 feet, NAPL area L3 at 0.07 feet, and NAPL area L4 at 0.19 feet. Since 2004, PCB concentrations in samples of NAPL tested have not exceeded 50 ppm, which is a concentration that would deem the NAPL as a hazardous waste. Remedial efforts are on going to remove NAPL to the extent possible from OU-II.

SPECIAL RESOURCES IMPACTED/THREATENED:

Studies conducted as part of the Remedial Investigation for OU-I and OU-II did not identify evidence of PCB-impact to the Hudson River, which is located approximately 400 feet to the east of the site.

## Site Health Assessment

Since the site is fenced and covered by asphalt or clean backfill, people will not come in contact with site-related contaminated soils unless they dig below the surface materials. Contaminated groundwater at the site is not used for drinking or other purposes and the

area is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the soil or groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site development. Soil vapor intrusion is not a concern for off-site buildings.

# Owners

## Current Owner(s)

Midtown Tracking Ventures, LLC

551 Fifth Avenue

New York NY 10176

# Operators

New York State Department of Environmental Conservation

**PUBLIC NOTICE** | **State Superfund Program**

Receive Site Information by Email. See next page to Learn How.

**Site Name:** Harmon Railroad Yard-Waste Water Area **February 4, 2013**
**Site No.** 360010 **Tax Map No.** 78.2-2-2
**Site Location:** Croton Point Road, Croton-on-Hudson 10519

# Inactive Hazardous Waste Disposal Site Classification Notice

The Inactive Hazardous Waste Disposal Site Program (the State Superfund Program) is the State's program for identifying, investigating, and cleaning up sites where the disposal of hazardous waste may present a threat to public health and/or the environment. The New York State Department of Environmental Conservation (Department) maintains a list of these sites in the Registry of Inactive Hazardous Waste Disposal Sites (the "Registry"). The site identified above, and located on a map on the reverse side of this page, was recently reclassified on the Registry as a Class 4 site as it no longer presents a significant threat to public health and/or the environment for the following reason(s):

An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of release or exposure pathway resulting from the on-site contamination.

Remediation of OU-1 included removal and off-site disposal of sludge within the former lagoon that contained polychlorinated biphenyls (PCBs) in excess of 50 ppm and removal and off-site disposal of soils adjacent to the lagoon with concentrations of PCBs in excess of 10 ppm. Soils with PCB concentrations less than 10 ppm were placed in the geotextile-lined containment cell created within the former lagoon and covered. Remediation of OU-2 included installation of a series of wells to support vacuum-enhanced recovery of Non Aqueous Phase Liquid (NAPL).

A site management plan has been implemented and is being enforced via a deed restriction for long-term management and monitoring of residual contamination remaining on site. The plan requires the restriction of site use to industrial uses; groundwater sampling and monitoring, as specified; maintenance of the cover system; an evaluation of the potential for soil vapor intrusion within any new structures built on the site; and, implementation of actions to reduce exposures via soil vapor intrusion, if necessary. The plan also restricts the withdrawal of new sources of groundwater without appropriate treatment.

The site is properly remediated and requires site management; therefore, it qualifies for Class 4 status on the Registry of Inactive Hazardous Waste Disposal sites.

**If you own property adjacent to this site and are renting or leasing your property to someone else, please share this information with them. If you no longer wish to be on the contact list for this site or otherwise need to correct our records, please contact the Department's Project Manager listed below.**

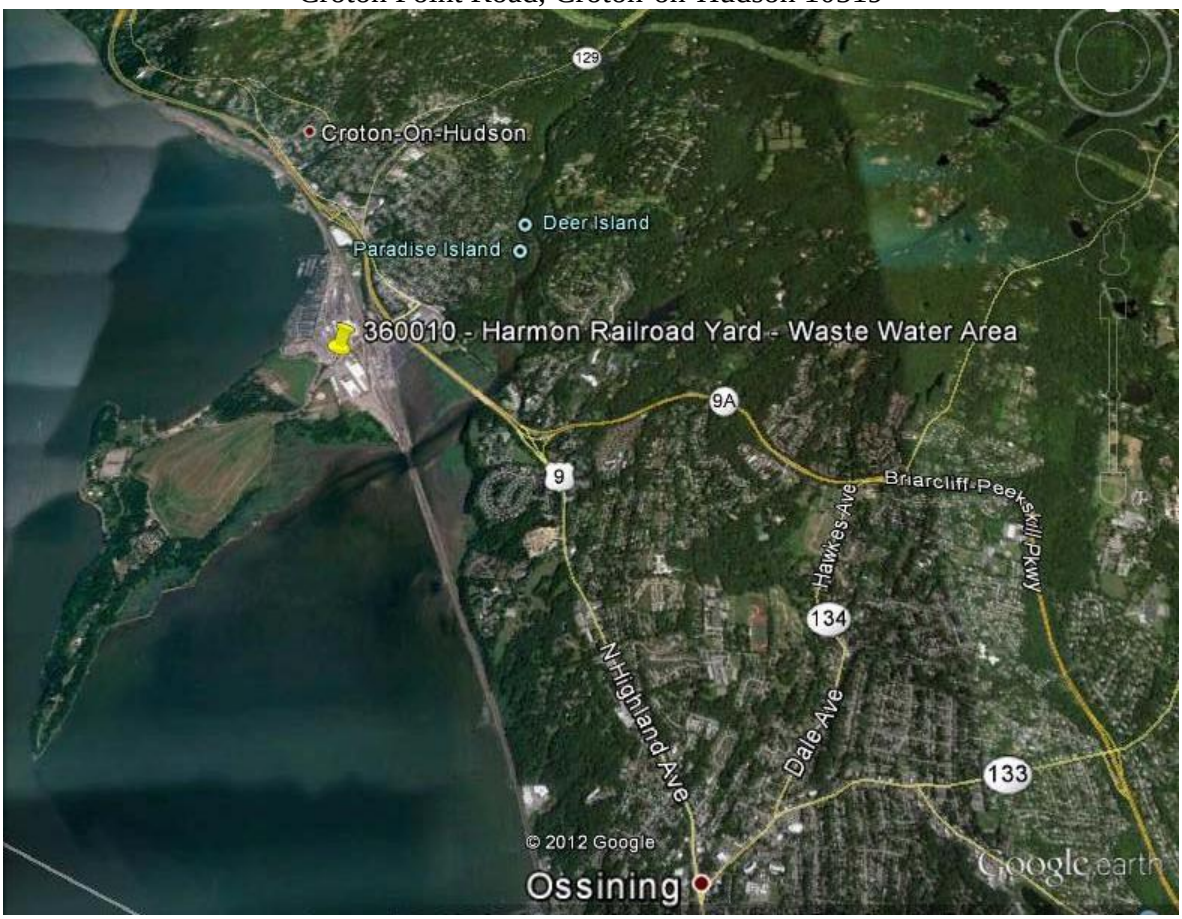
**FOR MORE SITE INFORMATION**

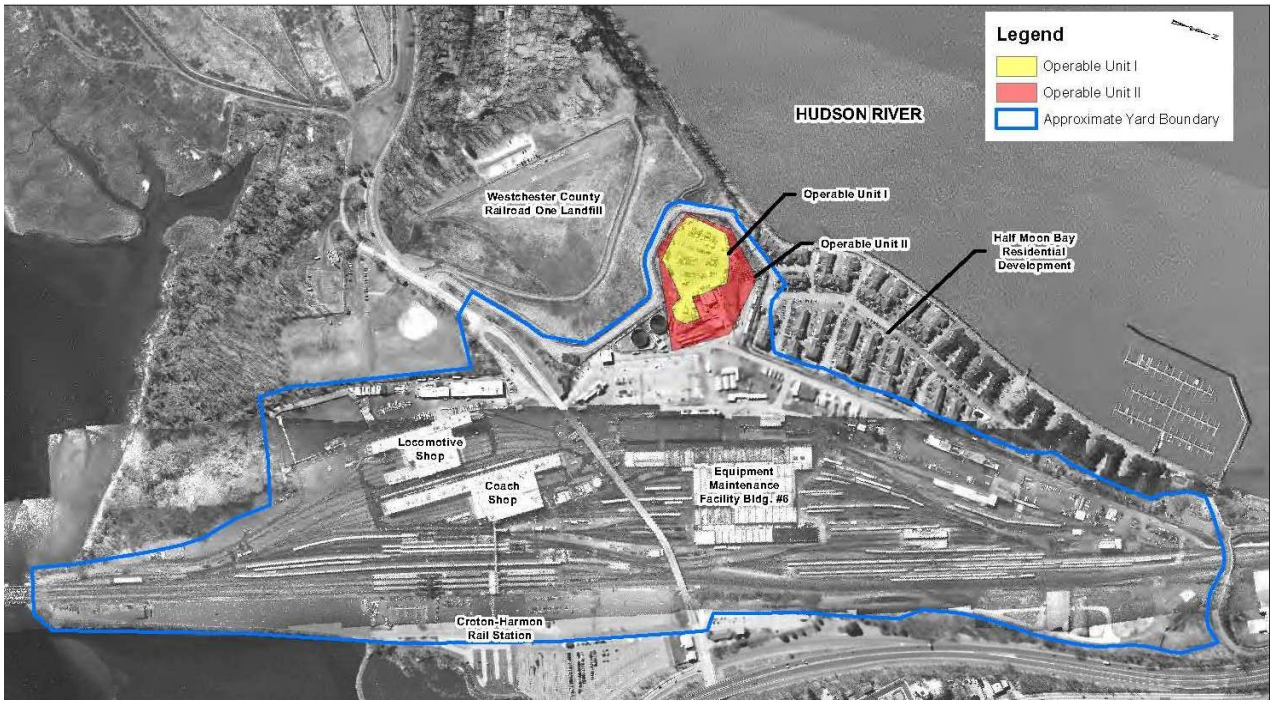
Additional information about this site can be found using the Department's "Environmental Site Remediation Database Search" engine which is located on the internet at: www.dec.ny.gov/cfmx/extapps/derexternal/index.cfm?pageid=3

Comments and questions are always welcome and should be directed as follows:
Project Related Questions
David Chiusano, Project Manager, NYS Department of Env. Conservation
Div. of Environmental Remediation, Remedial Bureau E
625 Broadway, 12th Floor, Albany, NY 12233-7017
518-402-9814, djchiusa@gw.dec.ny.us

The Department is sending you this notice in accordance with Environmental Conservation Law Article 27, Title 13 and its companion regulation (6 NYCRR 375-2.7(b)(6)(ii)) which requires the Department to notify all parties on the contact list for this site of this recent action.

**Approximate Site Location**
Harmon Railroad Yard-Waste Water Area
Site I.D. # 360010
Croton Point Road, Croton-on-Hudson 10519



**Receive Site Updates by Email**

Have site information such as this public notice sent right to your email inbox. NYSDEC invites you to sign up with one or more contaminated sites county email listservs available at the following web page: www.dec.ny.gov/chemical/61092.html . It's *quick*, it's *free*, and it will help keep you *better informed*.

As a listserv member, you will periodically receive site-related information/announcements for all contaminated sites in the county(ies) you select.

You may continue also to receive paper copies of site information for a time after you sign up with a county listserv, until the transition to electronic distribution is complete.

**Note:** Please disregard if you received this notice by way of a county email listserv.

**Electronic copies:**

R. Schick, Director, Division of Environmental Remediation
A. English, Director, Bureau of Technical Support
K. Lewandowski, Chief, Site Control Section
M. Cruden, Director, Remedial Bureau E
G. Heitzman, Acting Director, Remedial Bureau C
E. Moore, RHWRE, Region 3
D. Whitehead, Acting Regional Permit Administrator, Region 3
W. Rosenbach, Regional CPS, Region 3
K. Anders, NYSDOH
K. Kulow, NYSDOH
L. Ennist, DER, Bureau of Program Management
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**Harmon RR Yard**
**360010**
28 Total
Barb Wolosen

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