



Consulting Engineers and **Scientists**

Periodic Review Report August 2018

West Nyack Operating Center 766 West Nyack Road, West Nyack, NY

(Formerly 180 West Nyack Road)

Submitted to:

Orange and Rockland Utilities, Inc. 3 Old Chester Road Goshen, NY 10924

Submitted by:

GEI Consultants, Inc., P.C. 1301 Trumansburg Road, Suite N Ithaca, NY 14850 607-216-8955

August 2018 Project 1803131



<u>rd</u>, *Edward* P.G.

James H. Edwards, P.G. Project Manager

Kathleen F. Slimon, P.E. Senior Engineer

Table of Contents

Abbreviations and Acronyms	iii
Executive Summary	iv
1 Introduction	1
	<u> </u>
2. Site Overview	2
2. Eveloption of Domodu	
3. Evaluation of Remedy	4
4. Institutional and Engineering Control Compliance	5
4.1 Institutional Control Requirements	5
4.2 Engineering Controls (Soil Cap/Composite Cover System)	5
4.3 Institutional and Engineering Control Compliance	6
4.3.1 Site-Wide Inspection	7
4.3.2 Soil Cover System Monitoring	8
5. Monitoring Plan Compliance	9
5.1 Groundwater Monitoring	9
5.2 Monitoring Well Repairs, Replacement, and Decommissioning	9
5.3 Soil Vapor Intrusion Monitoring	9
6. Conclusions and Recommendations	10
6.1 Compliance with the SMP	10
6.2 Performance and Effectiveness of the Remedy	10
6.3 Future Periodic Review Report Submittals	10
References	11

Figures

- Site Location Map 1
- 2 Site Layout Map
- 3 Remedial Action Excavation Extent

Appendices

- A 2013 Site-Wide Inspection Report and Soil Cover System Monitoring
- B Emergency Generator Installation Summary Report
- C Photo Documentation
- D Annual Inspection and Certification Checklist
- E Institutional and Engineering Controls Certification Form

JHS/KFS:gd B:\Working\O&R\1803131 WNOC Inspection and Report\01_ADMIN\PRR.HW344014.2018-08-17.WNOC.doc

Abbreviations and Acronyms

Community Air Monitoring Program
GEI Consultants, Inc., P.C.
Health and Safety Plan
Milligrams per kilograms
New York State
New York State Department of Environmental Conservation
Orange and Rockland Utilities, Inc.
Polychlorinated Biphenyls
Periodic Review Report
Remedial Action Work Plan
Record of Decision
Rust Environment and Infrastructure
Site Management Plan
Underground Storage Tank
Volatile Organic Compound
West Nyack Operating Center

Executive Summary

GEI Consultants, Inc., P.C. (GEI) has prepared this Periodic Review Report (PRR) on behalf of Orange and Rockland Utilities, Inc. (O&R) for the West Nyack Operating Center (WNOC). This document is required as an element of the remedial program under the New York State (NYS) Inactive Hazardous Waste Disposal Site Remedial Program, administered by New York State Department of Environmental Conservation (NYSDEC).

The O&R WNOC facility is currently used as a satellite service center for O&R line crews with garage facilities and a fueling station for utility service trucks, parking space O&R vehicles, equipment storage, as well as office space. The site was remediated in 1998 in accordance with the NYSDEC-approved Remedial Action Work Plan (RAWP). The remedial actions implemented include:

- Excavation of soil containing petroleum related volatile organic compounds (VOCs) and polychlorinated biphenyls (PCBs) in excess of NYSDEC recommended cleanup levels.
- Placement of a composite cover system over remaining soil impacts at the site.
- Development and implementation of a Site Management Plan (SMP) for long term management of remaining contamination.

The institutional and engineering controls have proved effective in preventing uncontrolled exposure to remaining subsurface impacts on site. The condition of the asphalt cap in the parking and driveway areas throughout the site is improved subsequent to the 2016 re-paving, no cracks were identified within the asphalt. The section of damaged fence identified in the 2013 site-wide inspections has been replaced with new fencing.

The institutional and engineering controls established in the SMP were complied with during the reporting period with the exception of annual site wide inspections and annual cover system monitoring, which were not performed in 2014 through 2017. Notifications of improvements to the cover system and notice of intrusive activities were made to the NYSDEC in 2016 and 2017, respectively, in accordance with the SMP.

Annual site-wide inspections and annual cover system monitoring will be performed in accordance with the SMP. The next site-wide inspection and cover system monitoring will be performed in early August 2019. The results of the 2019 through 2023 annual site-wide inspections and annual cover system monitoring will be provided to the NYSDEC in the August 2023 PRR.

1. Introduction

GEI Consultants, Inc., P.C. (GEI) has prepared this Periodic Review Report (PRR) for the West Nyack Operating Center (WNOC) on behalf of Orange and Rockland Utilities, Inc (O&R). This document is required as an element of the remedial program under the New York State (NYS) Inactive Hazardous Waste Disposal Site Remedial Program, administered by New York State Department of Environmental Conservation (NYSDEC).

The site was remediated in accordance with Order on Consent Index # W3-0508-93-12, Site # 344014, which was executed on August 2, 1994. The site is located at 766 West Nyack Road, West Nyack, New York 10994. This report documents the site-wide inspection and soil cover system monitoring performed on August 7, 2018. This report has been prepared in accordance with the requirements of Chapter 6 of Division of Environmental Remediation (DER)-10, Technical Guidance for Site Investigation and Remediation, dated May 2010 and the guidance provided in the NYSDEC letter to O&R dated June 18, 2018.

2. Site Overview

The site is located at 766 West Nyack Rd., (formerly 180 West Nyack Rd.) in the Town of Clarkstown, County of Rockland, New York and is identified as Block 2 and Lots 47 and 48 on the Clarkstown Tax Map. **Figure 1** shows the site location. The site is an approximately 3-acre area bounded by Hackensack River to the north and east, Old Nyack Turnpike (also called West Nyack Road) to the south, and Consolidated Rail Corporation (Conrail) rail tracks to the west (**Figure 2**). O&R also owns Lot 43 south of West Nyack Road. This property is used for employee parking for the O&R facility and was not part of the remedial actions for the site and is not included in the engineering controls described in the Site Management Plan (SMP). South of the site, directly across Route 59, is the Grant Hardware Site (NYSDEC # 344031).

The WNOC facility is currently used as a satellite service center for O&R line crews with garage facilities and a fueling station for utility service trucks, parking space O&R vehicles, equipment storage, as well as office space. From the 1920s to approximately 1981, transformers, capacitors, and other electrical equipment were stored and repaired at the facility. Two underground storage tanks (USTs) were located in the center of the site and were used to store gasoline for fueling O&R's utility vehicles. One tank was identified as leaking and was removed in 1989. The second tank was removed during the 1997 to 1998 remedial actions.

A Remedial Investigation (RUST, July 1996), a Feasibility Study (RUST, July 1997), and additional Supplemental Subsurface Investigation (Tetra Tech, 2005) were performed to characterize the nature and extent of contamination at the site. The results of these investigations indicated the subsurface soil in the vicinity of the UST area exhibited elevated petroleum related volatile organic compound (VOC) concentrations. The depth of petroleum impacted soil ranged from 1 foot to 14 feet. Limited polychlorinated biphenyl (PCB) impacts in subsurface soil were also identified.

Quarterly groundwater sampling performed from 2006 through 2011 indicated that concentrations of chlorinated VOCs and their breakdown products have remained generally consistent, with the wells showing the greatest concentrations of chlorinated VOCs being located along the southern, upgradient, boundary of the site. The upgradient former Grant Hardware Site has been identified as the source of these impacts and they are not attributed to O&R.

The site was remediated in accordance with the NYSDEC-approved Remedial Action Work Plan (RAWP) dated September 1997. A Record of Decision (ROD) was issued in October 1997. The remedial actions included:

• Excavation of 9,328 cubic yards of soil from areas on the site containing petroleum related VOCs and PCBs in excess of NYSDEC recommended cleanup levels (0.06

milligrams to kilograms [mg/kg] benzene, and 1.2 mg/kg xylene, and 10 mg/kg PCBs). The extent of excavation is shown on **Figure 3**.

- Placement of a composite cover system over remaining soil impacts at the site.
- Development and implementation of a SMP for long term management of remaining contamination.
- Remedial activities were initiated by O&R in November 1997 and completed in April 1998 (RUST, 1998). ,The SMP was finalized in July 2012 (AECOM, 2012).

3. Evaluation of Remedy

The remedy has been effective in preventing uncontrolled exposure to remaining subsurface impacts on site.

- As documented in the Certification Report (RUST, 1998) the remedy was successful in the removal of soil from areas on the site containing petroleum related VOCs and PCBs in excess of NYSDEC recommended cleanup levels (0.06 mg/kg benzene, and 1.2 mg/kg xylene, and 10 mg/kg PCBs).
- A deed restriction to limit the use and development of the site to commercial or industrial uses only is in place.
- The soil cover system has been maintained to prevent exposure to remaining subsurface contamination.
- The NYSDEC has been notified of any potential subsurface disturbances in accordance with the SMP.

4. Institutional and Engineering Control Compliance

4.1 Institutional Control Requirements

A series of Institutional Controls is required by the ROD to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the site to commercial or industrial uses only. Adherence to these Institutional Controls on the site is required by the deed restriction and are implemented under the SMP. The Institutional Controls summarized from the SMP are provided below. The complete detailed listing of the Institutional Controls is provided in Section 2.3 of the SMP.

- Compliance with the deed restriction and the SMP;
- The Engineering Control (soil cap/composite cover system) must be operated and maintained as specified in the SMP;
- The integrity of soil cover system on the Controlled Property must be visually inspected annually;
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP (The Periodic Review Report will be submitted to the Department every fifth year, beginning eighteen months after the Certificate of Completion or Satisfactory Completion Letter is issued);
- The property may only be used for industrial or commercial use provided that the long-term Engineering and Institutional Controls included in this SMP are employed;
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the Excavation Work Plan provided in the SMP;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use;
- The potential for vapor intrusion must be evaluated for any buildings developed in the area while groundwater impacts are still present and any potential impacts that are identified must be monitored or mitigated; and
- Vegetable gardens and farming on the property are prohibited.

4.2 Engineering Controls (Soil Cap/Composite Cover System)

Exposure to remaining contamination in soil/fill at the site is prevented by a soil cover system placed over the site. Following remedial actions, the excavated area was backfilled with a combination of clean fill and thermally treated soils. An impermeable asphalt cap was then placed over the entire site. This cap consists of 12 inches of structural sub-base, 3 inches of binder course, and 1 ¹/₂ inches of wearing course placed in the excavated areas, and 3 inches of binder course and 1 ¹/₂ inches of wearing course placed over the majority of the remainder of the

site. In the driveway areas which were already paved, Petro- Mats[®] were laid over the existing pavement and covered with approximately 1 ½ inches of wearing course. Additionally, several inches of oiled stone chips were placed beneath the transmission towers in the northernmost portion of the site, as well as in the areas immediately adjacent to the rear of the building in order to protect the integrity of the asphalt cap. Security fencing was replaced around the site as well.

The Excavation Work Plan provided as Appendix A of the SMP outlines the procedures required to be implemented in the event the cover system is breached, penetrated or temporarily removed, and any underlying remaining contamination is disturbed. Any work conducted pursuant to the Excavation Work Plan must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP), and Community Air Monitoring Plan (CAMP) prepared for the site.

The SMP specifies that a visual inspection of the complete soil cover system will be conducted on an annual basis concurrently with the site-wide inspection. Components of the soil cover system will be inspected for the following:

- Integrity of asphalt covered roads;
- Integrity of sidewalks;
- Integrity of concrete building slabs; and
- Integrity of "clean soil cover/cap."

If any of the components of the composite cover system are not functioning as designed, maintenance and repair are required immediately to restore the integrity of the soil cap. Results of the inspection will be provided to the NYSDEC on an annual or periodic basis as designated by the NYSDEC.

4.3 Institutional and Engineering Control Compliance

The SMP for the site was issued in July 2012. The first annual site-wide inspection and cover system monitoring was performed in July 2013 by AECOM on behalf of O&R. The July 2013 Site Wide Inspection and Soil Cover System Monitoring report prepared by AECOM is provided in **Appendix A**. Formal annual site-wide inspections and soil cover system monitoring were not performed between July 2013 and August 2018. The following notifications were made to the NYSDEC in accordance with the SMP between July 2013 and August 2018:

• On September 22, 2016 O&R provided notification of re-pavement of the WNOC parking and driveway areas. The existing pavement on-site was milled to a depth of approximately 2-inches and resurfaced to match existing grade. The paving project did not extend into or below the structural sub-base below the asphalt, and therefore was not intrusive work and did not require implementation of the Excavation Work Plan. The NYSDEC provided approval of the paving project via e-mail on September 27, 2016. This project significantly improved the condition of the soil cap.

- In June 2017 O&R submitted notification and a summary of work for installation of an emergency generator at the WNOC site to NYSDEC for approval. NYSDEC provided approval for the proposed work via e-mail on June 20, 2017. O&R provided notification to NYSDEC prior to construction. The installation included:
 - Construction of a 17-foot by 13-foot foundation platform with columns and footings extending to 48 inches below grade;
 - o Below ground electric service (located approximately 36 inches below grade);
 - Below ground natural gas service supply line (approximately 100 feet from main at between 36-48 inches below grade).

A letter report summarizing the installation activities, with photos documenting the installation, analytical results of the excavated/removed soil, and disposal manifests is provided in **Appendix B**. This work was performed in accordance with the Excavation Work Plan, as specified in the SMP. The CAMP was not implemented during this work as the excavation was performed in an area west of the PCB and petroleum impacts identified during the remedial investigations and thus did not involve the disturbance of the previously remediated area.

No additional intrusive activities were performed at the site between July 2013 and August 2018.

The site continues to be industrial/commercial use as a satellite service center for O&R line crews with garage facilities for utility service trucks, parking space for O&R vehicles, as well as office space. There has been no groundwater use, building development or use for vegetable gardens or farming since the July 2013 inspection.

The site-wide inspection and soil cover system monitoring was performed by O&R and GEI on August 7, 2018. The soil cover system was found to be functioning as designed in accordance with the details provided in the 1998 Certification Report. Details of the site inspection and soil cover system monitoring are provided below.

4.3.1 Site-Wide Inspection

A periodic review inspection was conducted by O&R and GEI on August 7, 2018. Photographs of the site conditions during the site walk are included in **Appendix C**. A copy of the Annual Inspection and Certification Checklist is included as **Appendix D**. A copy of the NYSDEC Institutional and Engineering Controls Certification Form is included as **Appendix E**.

Overall general site conditions were improved since the July 2013 site inspection. There was no evidence of unauthorized entry, damage to entrances or exits, illegal dumping, or unusual odors. The monitoring wells were not opened or damaged and were protected and not paved over during the 2016 site re-paving. There were some minor housekeeping issues identified but none of the housekeeping issues impacted the effectiveness of the institutional or engineering controls. Miscellaneous equipment and debris is present along the northern and northeastern fence line

and beneath the transmission towers in the northern area of the site. Soil piles were also identified beneath the transmission towers in the northern portion of the site.

The site fence line and gravel areas are highly vegetated; however, the fence is intact. The broken portion of the fence identified during the 2013 site inspection has been replaced with new fencing (**Appendix C**, Photograph 5).

4.3.2 Soil Cover System Monitoring

The following visual observations on the integrity of the soil cover system were made during the August 7, 2018 site walk. The photographs referenced below are provided in **Appendix C**.

- The condition of the asphalt cap in the parking and driveway areas throughout the site is improved subsequent to the 2016 re-paving. No cracks were identified within the asphalt. (Photographs 1 through 3)
- The oil stone chips are present beneath the transmission towers. There is significant vegetation and debris in these areas. The integrity of the cap preventing exposure to subsurface soil at these locations appears to be intact (Photograph 4).
- Consistent with the 2013 inspection there is some erosion of the oil stone chips on the sloped areas adjacent to the southwestern side of the building and cracked pavement was observed along the top of the sloped area adjacent to the building. There is also erosion of a concrete platform above the slope in this area, conditions are consistent with those documented in 2013 (Photograph 6). The oil stone chips, asphalt and concrete are still present and preventing exposure to the underlying soil. Since the oil chips were placed in the rear of the building to protect the integrity of the asphalt cap, future maintenance of this area should be considered to prevent further erosion.
- The pavement patch for the new emergency generator installed in 2017 is in good condition with the exception of a small depression/crack in the southwest area of the pavement (Photographs 7 and 8). The subsurface soil is not exposed. This depression/ crack should be repaired to prevent future worsening conditions.
- There are cracks present in the concrete floor of the garage on the eastern side of the building (Photograph 9). The major cracks identified in the 2013 inspection were patched. The minor cracks are consistent with those documented during the 2013 inspection. There is no exposure to sub-surface soil.
- There is no asphalt cover in the area beneath the pole rack storage along the western fence line. This is consistent with conditions noted during the 2013 inspection. The paving plan submitted to and approved by the NYSDEC in 2016 did not include these areas in the areas to be paved.
- No cracks were observed in the pavement on Lot 48 west of the fence-line and east of the RR (Photographs 10 and 11).

5. Monitoring Plan Compliance

5.1 Groundwater Monitoring

Groundwater sampling will not be conducted by O&R, as any site impacts are the result of contamination at an upgradient, off-site source (Former Grant Hardware Facility Site). Site access will be provided to the potentially responsible party for the Former Grant Hardware site and their representatives to complete any required groundwater sampling.

Access to the site for groundwater monitoring has not been requested during this reporting period.

5.2 Monitoring Well Repairs, Replacement, and Decommissioning

The monitoring wells were not accessed during this reporting period, therefore, no monitoring well repairs, replacement, or decommissioning were completed. The monitoring wells were not damaged or paved over during the re-paving performed on-site in 2016 and appear in good condition.

5.3 Soil Vapor Intrusion Monitoring

No new structures were built, and no soil vapor intrusion sampling was conducted during this reporting period.

6. Conclusions and Recommendations

6.1 Compliance with the SMP

The institutional and engineering controls established in the SMP and described above in Section 4 were complied with during the reporting period with the exception of annual site-wide inspections and annual cover system monitoring, which were not performed in 2014 through 2017. Notifications of improvements to the cover system and notice of intrusive activities were made to the NYSDEC in 2016 and 2017, respectively, in accordance with the SMP.

Annual site-wide inspections and annual cover system monitoring will be performed in accordance with the SMP. The next site-wide inspection and cover system monitoring will be performed in early August 2019. The results of the 2019 through 2023 annual site-wide inspections and annual cover system monitoring will be provided to the NYSDEC in the August 2023 PRR.

6.2 Performance and Effectiveness of the Remedy

The institutional and engineering controls have proved effective in preventing uncontrolled exposure to remaining subsurface impacts on site.

The conditions of the engineering controls are improved since the 2013 site-wide inspection. The condition of the asphalt cap in the parking and driveway areas throughout the site is improved subsequent to the 2016 re-paving, no cracks were identified within the asphalt. The section of damaged fence identified in the 2013 site-wide inspections was replaced with new fencing.

The site cover system was intact and no exposure to subsurface soil was identified. The recommendations provided in Section 4 as improvements to the cover system to prevent potential future exposures are summarized below:

• Repair of the depression/crack in the asphalt/patch recently installed for the emergency generator.

6.3 Future Periodic Review Report Submittals

In accordance with the SMP a PRR will be submitted to the Department every fifth year, the next PRR submittal will be in August 2023. The PRR will include the results of the 2019 through 2023 annual site-wide inspection and cover system monitoring reports.

References

New York State Department of Environmental Conservation (NYSDEC), 2018. *Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal, Orange and Rockland Utilities Inc. Site no. 344014*, June 18, 2018.

Rust Environment and Infrastructure (RUST), 1996. *Remedial Investigation Report, Orange and Rockland Utilities, Inc., Inactive Hazardous Waste Disposal (I.D. # 344014), West Nyack, NY*, July 1996.

RUST, 1997. Feasibility Study Report, Orange and Rockland Utilities, Inc., West Nyack, New York, Inactive Hazardous Waste Disposal Site (I.D. # 344014), March 1997; Amended July 1997.

RUST, 1998, Certification Report, O&R Inactive Hazardous Waste Disposal Site (I.D. # 344014), West Nyack, NY, June 1998

Tetra Tech EC, Inc., 2005. Supplemental Subsurface Investigation, Orange and Rockland Utilities, Inc., West Nyack Operating Center, 766 West Nyack Road, West Nyack, New York, August 2005.

AECOM, 2012, Site Management Plan Orange and Rockland Utilities (West Nyack Operating Center) 180 West Nyack Road, West Nyack, NY 10994, NYSDEC Site Number: 344014, July 2012.

PERIODIC REVIEW REPORT ORANGE AND ROCKLAND UTILITIES WEST NYACK OPERATIONS CENTER AUGUST 17, 2018

Figures



Periodic Review Report West Nyack Operating Center West Nyack, New York		SITE LOCATION MAP	
Orange and Rockland Utilities, Inc.	VLI Consultants		
Spring Valley, New York	Project 1803131	August 2018	Fig. 1

\\gtb1v-fs01\ I:\Project\ORANGE & ROCKLAND\West Nyack\1803131\CAD\Figures\PRR\1803131_PRR_SLM.dwg - 8/13/2018



- GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRID, IGN, AND THE GIS USER COMMUNITY, IMAGE DATE 3/12/2016, ACCESSED ON 8/13/2018.
- FIGURE 1-2: CURRENT SITE LAYOUT AND MONITORING WELL LOCATIONS, PREPARED 2. BY AECOM, DATE: 3/25/09, SCALE: 1" = 140'.
- 3. TAX MAP, SHEET 65.05, TOWN OF CLARKSON, ROCKLAND COUNTY, NEW YORK, REVISED THROUGH FEBRUARY 28, 2018, SCAKE: 1" = 100'.



Periodic Review Report West Nyack Operating Center West Nyack, New York

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

LEGEND:



MONITORING WELL PROPERTY BOUNDARY CHAIN-LINK FENCE



\\gtb1v-fs01\ I:\Project\ORANGE & ROCKLAND\West Nyack\1803131\CAD\Figures\PRR\1803131_PRR_SLOM.dwg - 8/13/2018



- FIGURE 1-2: CURRENT SITE LAYOUT AND MONITORING WELL LOCATIONS, PREPARED 2. BY AECOM, DATE: 3/25/09, SCALE: 1" = 140'.
- TAX MAP, SHEET 65.05, TOWN OF CLARKSON, ROCKLAND COUNTY, NEW YORK, З. REVISED THROUGH FEBRUARY 28, 2018, SCAKE: 1" = 100'.
- EXCAVATION EXTENTS FROM FIGURE 2: SITE LAYOUT, PREPARED BY AECOM, SCALE: 4. 1" = 120', DATE: 2/15/2012.



Periodic Review Report West Nyack Operating Center West Nyack, New York

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





MONITORING WELL EXTENT OF EXCAVATION PROPERTY BOUNDARY CHAIN-LINK FENCE



\\gtb1v-fs01\ I:\Project\ORANGE & ROCKLAND\West Nyack\1803131\CAD\Figures\PRR\1803131_PRR_SLOM.dwg - 8/13/2018

Fig. 3



Appendix A

2013 Site-Wide Inspection Report and Soil Cover System Monitoring



Environment

Prepared for: Orange & Rockland 3 Old Chester Road Goshen, NY 10929 Prepared by: AECOM Chestnut Ridge, NY 60304240 September 2013

2013 Site-Wide Inspection Report and Soil Cover System Monitoring West Nyack Operating Center 180 West Nyack Road, West Nyack, NY





Environment

Prepared for: Orange & Rockland 3 Old Chester Road Goshen, NY 10929 Prepared by: AECOM Chestnut Ridge, NY 60304240 September 2013

2013 Site-Wide Inspection Report and Soil Cover System Monitoring West Nyack Operating Center 180 West Nyack Road, West Nyack, NY

ENGINEERING CERTIFICATION

I, Eleanor Vivaudou, certify that I am currently a NYS registered professional engineer and that this Site-Wide Inspection Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved Site Management Plan and any DER-approved modifications. For each institutional or engineering control identified for the site, I certify that all of the following statements are true:

- The inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- Use of the site is compliant with the deed restriction;
- The engineering control system is performing as designed and is effective;
- 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 in this report is accurate and complete.



Environment

Prepared for: Orange & Rockland 3 Old Chester Road Goshen, NY 10929 Prepared by: AECOM Chestnut Ridge, NY 60304240 September 2013

 I certify that all information and statements in this certification form 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, Eleanor Vivaudou, of AECOM, am certifying as the Owner's Designated Site Representative for the site.

Respectfully submitted, AECOM Technical Services Northeast, Inc.

lunch Nuch

Eleanor Vivaudou, P.E. Registered Professional Engineer New York License No. 089692

9 17/2013 Date



1.0	Introduction1-					
2.0	Site E	ngineeri	ing and Institutional Controls	2-1		
	2.1	Enginee	ering Controls	2-1		
		2.1.1	Engineering Control Systems	2-1		
		2.1.2	Soil Cover System Monitoring	2-1		
	2.2	Institutio	onal Controls	2-1		
	2.3	Excavat	tion Work Plan	2-2		
	2.4	Soil Vap	oor Intrusion Evaluation	2-2		
	2.5	Inspecti	ons and Notifications	2-2		
		2.5.1	Inspections	2-2		
		2.5.2	Notifications	2-2		
	2.6	Conting	ency Plan	2-3		
		-				
3.0	Annua	l Site-W	/ide Inspection Findings	3-1		
	3.1	Site-Wie	de Inspection	3-1		
		3.1.1	General Site Conditions	3-1		
		3.1.2	Engineering Control Systems	3-1		
		3.1.3	Institutional Controls	3-1		
		3.1.4	Excavation Work Plan	3-1		
		3.1.5	Notifications	3-1		
		3.1.6	Contingency Plan	3-1		
	3.2	Soil Cov	ver System Monitoring	3-1		
	3.3	Media N	Nonitoring Program	3-2		
		3.3.1	Groundwater Monitoring	3-2		
		3.3.2	Monitoring Well Repairs, Replacement, and Decommissioning	3-2		
		3.3.3	Soil Vapor Intrusion Monitoring	3-2		
4.0	Concl	usions.		4-1		
5.0	References					

List of Figures

Figure 1 Site Location Map

Figure 2 Site Layout

Figure 3 Site Inspection Observations

List of Appendices

Appendix A Inspection Checklist

Appendix B Photographs

This document is required as an element of the remedial program at the West Nyack Operating Center (WNOC) under the New York State (NYS) Inactive Hazardous Waste Disposal Site Remedial Program, administered by New York State Department of Environmental Conservation (NYSDEC). The site was remediated in accordance with Order on Consent Index # W3-0508-93-12, Site # 344014, which was executed on August 2, 1994. The site is located at 180 West Nyack Road, West Nyack, New York 10994.

This report documents the annual site-wide inspection and soil cover system monitoring in compliance with the July 2012 Site Management Plan (SMP; AECOM, 2012).

2.0 Site Engineering and Institutional Controls

A description of the site engineering and institutional controls from the SMP is provided below.

2.1 Engineering Controls

2.1.1 Engineering Control Systems

The site engineering control system is a soil cap (composite cover system). Exposure to remaining contamination in soil/fill at the site is prevented by a soil cover system placed over the site. Following remedial actions, the excavated area was backfilled with a combination of clean fill and thermally-treated soils. An impermeable asphalt cap was then placed over the entire site. This cap consists of 12 inches of structural sub-base, 3 inches of binder course, and 1 ½ inches of wearing course placed in the excavated areas, and 3 inches of binder course and 1 ½ inches of wearing course placed over the majority of the remainder of the site. In the driveway areas which were already paved, Petro-Mats® were laid over the existing pavement and covered with approximately 1 ½ inches of wearing course in the northernmost portion of the site, as well as in the areas immediately adjacent to the rear of the building in order to protect the integrity of the asphalt cap. Security fencing was replaced around the site as well.

2.1.2 Soil Cover System Monitoring

A visual inspection of the complete soil cover system will be conducted on an annual basis concurrently with the site-wide inspection. Components of the soil cover system will be inspected for the following:

- Integrity of asphalt covered roads;
- Integrity of sidewalks;
- Integrity of concrete building slabs; and
- Integrity of "clean soil cover/cap."

If any of the components of the composite cover system are not functioning as designed, maintenance and repair are required immediately to restore the integrity of the soil cap. Results of the inspection will be provided to the NYSDEC on an annual or periodic basis as designated by the NYSDEC.

2.2 Institutional Controls

A series of institutional controls is required by the ROD to: (1) implement, maintain and monitor engineering control systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the site to commercial or industrial uses only. Adherence to these institutional controls on the site is required by the deed restriction and is implemented under the SMP. These institutional controls are:

• Compliance with the deed restriction and SMP by the grantor and the grantor's successors and assigns;

- The engineering control must be operated and maintained as specified in SMP;
- The engineering control on the controlled property must be inspected at a frequency and in a manner defined in the SMP; and
- Data and information pertinent to site management of the controlled property must be reported at the frequency and in a manner defined in SMP.
- Institutional controls identified in the deed restriction may not be discontinued without an amendment to or extinguishment of the deed restriction.

2.3 Excavation Work Plan

The site has been remediated for commercial or industrial use. Any future intrusive work that will penetrate the soil cap, or encounter or disturb the remaining contamination, including any modifications or repairs to the existing cover system will be performed in compliance with the Excavation Work Plan that is attached as Appendix A to the SMP.

2.4 Soil Vapor Intrusion Evaluation

Prior to the construction of any enclosed structures located over areas that contain remaining contamination and the potential for soil vapor intrusion has been identified, a soil vapor intrusion evaluation will be performed to determine whether any mitigation measures are necessary to eliminate potential exposure to vapors in the proposed structure. Alternatively, a soil vapor intrusion mitigation system may be installed as an element of the building foundation without first conducting an investigation.

2.5 Inspections and Notifications

2.5.1 Inspections

A site-wide inspection is performed a minimum of once a year. The inspection will address the following issues:

- General site conditions at the time of the inspection;
- An evaluation of the condition and continued effectiveness of engineering controls;
- Compliance with all institutional controls, including site usage;
- The site management activities being conducted; and
- Confirmation that site records are up to date.

2.5.2 Notifications

Notifications will be submitted by the property owner to the NYSDEC as needed for the following reasons:

- 60-day advance notice of any proposed changes in site use that are required under the terms of the Orders on Consent, 6NYCRR Part 375, and/or Environmental Conservation Law.
- 7-day advance notice of any proposed ground-intrusive activities pursuant to the Excavation Work Plan.

- Notice within 48-hours of any damage or defect to the foundations structures that reduces or has the potential to reduce the effectiveness of the engineering control and likewise any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of the engineering control in place at the site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring
 ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall
 describe and document actions taken to restore the effectiveness of the engineering
 controls.
- Any change in the ownership of the site or the responsibility for implementing SMP will include the following notifications:
 - At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser has been provided with a copy of the Orders on Consent, and all approved work plans and reports, including SMP.
 - Within 15 days after the transfer of all or part of the site, the new owner's name, contact representative, and contact information will be confirmed in writing.

2.6 Contingency Plan

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions. In the event of an emergency condition impacting the engineering control or building, Orange & Rockland will follow its existing emergency procedures and evacuation plan for this facility. In addition, a copy of the Spill Prevention, Control, and Countermeasure Plan for the West Nyack Operating Center is attached as Appendix F to the SMP. As appropriate, the fire department and other emergency response group will be notified immediately by telephone of the emergency.

The annual site-wide inspection and soil cover system monitoring was conducted on July 24, 2013. The inspection checklist is provided in Appendix A. A photo log is provided in Appendix B.

3.1 Site-Wide Inspection

3.1.1 General Site Conditions

Housekeeping is generally good at the site, with some minor exceptions. There is a pile of dirt and construction debris covered by a tarp along the western side of the property. There was no evidence of unauthorized entry, damage to entrances or exits, illegal dumping, or unusual odors. The monitoring wells were not opened or damaged.

3.1.2 Engineering Control Systems

See Section 3.2 of this report for soil cover system monitoring.

There is a break in the top rail of the security fence on the west side of the property. The fence along the top rail north of this break appears to be loose. Otherwise, the security fence appears to be intact. There is vegetation growing along some areas of the fence which may impact the fence in the future.

3.1.3 Institutional Controls

In the past year, the site continues to be operated as an Orange & Rockland operating center. There is no residential use of the site. There is no potable or non-potable use of the groundwater on-site. There were no new structures built on-site in the past year. There were no vegetable gardens or farming on-site during the past year. This site-wide inspection was conducted in conformance with the SMP.

3.1.4 Excavation Work Plan

In the past year, no excavation was conducted at the site.

3.1.5 Notifications

During the past year, there were no circumstances requiring notice to NYSDEC. Following Hurricane Sandy in November 2012, both Orange & Rockland and NYSDEC inspected the site. No damage to the site from the hurricane was observed.

3.1.6 Contingency Plan

In the past year, there were no emergencies requiring implementation of the contingency plan.

3.2 Soil Cover System Monitoring

At the time of the site-wide inspection on July 24, 2013, the following observations were made regarding the integrity of the capped areas:

There are cracks of varying degrees throughout most areas of the asphalt cap;

- There are some breaks and depressions in the asphalt caps. At one location, soil appears to be exposed;
- The asphalt cap may need maintenance along the edge of the cap on the eastern side of the property;
- Soil appears to wash onto the asphalt cap to the north and west near the fence;
- A capped trench was observed, but according to the WNOC representative, the trenching occurred prior to July 2012;
- There is no asphalt cover beneath the pole racks;
- A loading dock platform is currently being replaced, but no impacts to the soil will be made during construction;
- No sidewalks were observed;
- The building slabs appear to be in good condition, without cracks or depressions, with the exception of the garage floor which has some cracks; and,
- The clean soil cover/cap is located beneath the asphalt and cannot be observed.

The location of the impacted areas is shown in Figure 3.

3.3 Media Monitoring Program

3.3.1 Groundwater Monitoring

Groundwater sampling will not be conducted by Orange & Rockland, as any site impacts are the result of contamination at an upgradient, off-site source (Former Grant Hardware Facility Site). Site access will be provided to the potentially responsible party for the Former Grant Hardware site and their representatives to complete any required groundwater sampling.

In the past year, access to the site for groundwater monitoring was not requested.

3.3.2 Monitoring Well Repairs, Replacement, and Decommissioning

If biofouling or silt accumulation occurs in the on-site and/or off-site monitoring wells, the wells will be physically agitated/surged and redeveloped. Additionally, monitoring wells will be properly decommissioned and replaced, if an event renders the wells unusable. The NYSDEC will be notified prior to any repair or decommissioning of monitoring wells for the purpose of replacement, and the repair or decommissioning and replacement process will be documented in the subsequent periodic report.

In the past year, no monitoring well repairs, replacement, or decommissioning were completed or necessary.

3.3.3 Soil Vapor Intrusion Monitoring

In the past year, no new structures were built. No soil vapor intrusion sampling was conducted.

4.0 Conclusions

Based on the findings of the July 24, 2013 site-wide inspection, the engineering controls generally continue to perform as designed. However, sealing of cracks and breaks in the asphalt cap and the garage floor is recommended. In particular, the pot hole which appears to expose underlying soil should be repaired. The edge of the asphalt on the eastern side of the site should be repaired. The broken top rail of the fence should be repaired to maintain security. In the past year, there were no changes or needed changes to the remedial system. General site conditions are satisfactory. There are minor housekeeping issues that should be addressed including removal of the dirt and construction debris pile and nearby wood debris.

Orange & Rockland continues to comply with the requirements of the SMP and deed restrictions. The site use is unchanged. There was no residential use on-site. There is no site use of groundwater. In the past year, there was no need to submit notices to the NYSDEC. There were no buildings constructed which would require soil vapor intrusion evaluation. This report addresses the annual site-wide inspection and soil cover system monitoring. Following Hurricane Sandy, both Orange & Rockland and NYSDEC inspected the site for damage. No damage to the remedial system was identified.

No environmental sampling was conducted in the past year or required by the SMP. The potentially responsible party for the Former Grant Hardware Facility Site did not request access to the site for sampling.

5.0 References

AECOM, Inc., 2012. Site Management Plan. West Nyack Operating Center. Prepared for Orange & Rockland Utilities, Inc. July

Figures




Plotted: Feb 15, 2012 - 9:14am ttOrange & Rockland/60218324 West Nyack/Figures/Cadd/SiteLayout-Fig2-2012-02-15.dwg Layout: Layout1 Piscataway on uspsw2vfp001\Data uspsw2vfp001\Environment\(J) Karchj1 Plotted: Fel
J:\Project\Orange & User: File:



Appendix A

Inspection Checklist

Annual Site-Wide Inspection and Soil Cover System Monitoring Checklist

Site: West Nyack Orange and Rockland (WNOC) Address: 180 West Nyack Road, West Nyack, NY 10994
Date of Inspection: $\frac{1/24/13}{24}$
Weather: _Sunny hot human 85-57
Inspector: Claire Hunt Company: AECOM, Inc., 100 Red Schoolhouse Road, Chestnut Ridge, NY 10977
WNOC Representative: <u>Maubeth McCormick</u>
General Site Conditions
Are there any new or removed structures (Yes) No Replacement of doadisdock (Picture)
Does the site have proper up keep Yes No house Kendirt pile] one of the
Evidence of unauthorized entry Yes No
Damage to entrances/exits Yes
Any illegally dumped materials Yes No
Any unusual odors Yes No
Are any monitoring wells opened or damage ves No
Engineering Control Systems

The site engineering control systems is a soil cap (composite cover system). Exposure to remaining contamination in soil/fill at the site is prevented by a soil cover system placed over the site. Following remedial actions, the excavated area was backfilled with a combination of clean fill and thermally-treated soils. An impermeable asphalt cap was then placed over the entire site. This cap consists of 12 inches of structural sub-base, 3 inches of binder course, and 1 ½ inches of wearing course placed in the excavated areas, and 3 inches of binder course and 1 1/2 inches of wearing course placed over the majority of the remainder of the site. In the driveway areas which were already paved, Petro-Mats® were laid over the existing pavement and covered with approximately 1 ½ inches of wearing course. Additionally, several inches of oiled stone chips were placed beneath the transmission towers in the northernmost portion of the site, as well as in the areas immediately adjacent to the rear of the building in order to protect the integrity of the asphalt cap.

areas immediately adjacent to the rear of the buildi	ng in order to prote	northernm ect the integ	grity of the asphalt cap.	as well as i	n the
<i>Note location and size of deficiencies</i> Note Integrity of: asphalt covered roads: Good Cracks	on attached to SD/We Holes	holes	Stain/Seepage	edage	2 maintenance
sidewalks: Good Cracks	Holes	Stain/Se	eepage N/A		1-100
concrete building slabs: GoodCracks	Holes		Stain/Seepage	50me	prog jeon
clean soil cover/cap	Cracks	Holes	Stain/See	page	some voc keft
Was maintenance or repair of the cap	oped areas con	ducted?	Yes No		

AECOM

Integrity of Security Fencing around the site: Good of exception s

Institutional Controls (Site Restrictions)

The property may only be used for industrial or commercial use provided that the longterm Engineering and Institutional Controls included in this SMP are employed. (Yes) No

reedily repair

The property may not be used for a higher level of use, such as unrestricted or restricted residential use without additional remediation and amendment of the deed restriction, as approved by the NYSDEC. Residential use observed? Yes No

All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with this SMP.

Was excavation conducted on site? Yes No Not in the last year.

Was the Excavation Work Plan followed? Yes No NA Were the CAMP and EHASP followed? Yes No

Was there any construction or other disturbances of the cap conducted on site? Yes No Ask for documentation if yes.

The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use. Any potable/nonpotable well usage? Yes No

The potential for vapor intrusion must be evaluated for any buildings developed in the area while groundwater impacts are still present and any potential impacts that are identified must be monitored or mitigated. New buildings in past year? Yes (No)

No

No

Was Soil Vapor Intrusion Sampling Conducted? Yes

Vegetable gardens and farming on the property are prohibited Observed? Yes

The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. Yes No has inspected as *Ask for documentation if yes.*

Groundwater Sampling

Was access granted to representatives of the Former Grand Hardware Facility Site for sampling? Not requested - No samplery to Jete in past year

Were monitoring well repairs, replacement or decommissioning required? \mathcal{NO}

Notifications Required Yes/No

60-day advance notice of any proposed changes in site use that are required under the terms of the Orders on Consent, 6NYCRR Part 375, and/or Environmental Conservation Law. Yes No) Not required in part year.

7-day advance notice of any proposed ground-intrusive activities pursuant to the not required in part year, Excavation Work Plan. Yes (No?

Notice within 48-hours of any damage or defect to the foundations structures that reduces or has the potential to reduce the effectiveness of the Engineering Control and likewise any action to be taken to mitigate the damage or defect. Yes No vot required in part year

Verbal notice by noon of the following day of any emergency, such as a fire, flood, or environment and the public. Yes No vo damage for Sandy hardy witcher inspected. Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and chall earthquake that reduces or has the potential to reduce the effectiveness of the

Any change in the ownership of the site or the responsibility for implementing this SMP will include the following notifications:

At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser has been provided with a copy of the Orders on Consent, and all approved work plans and reports, including this SMP Yes No Not required in post year

Within 15 days after the transfer of all or part of the site, the new owner's name, contact representative, and contact information will be confirmed in writing. Yes Not Ask for documentation if yes.

Contingency Plan

In the event of an emergency condition impacting the Engineering Control or building, O&R will follow its existing emergency procedures and evacuation plan for this facility. As appropriate, the fire department and other emergency response group will be notified immediately by telephone of the emergency.

Did an emergency occur in the past year? Yes (No) Was the fire department or other emergency response group notified immediately? Yes No NM

Appendix B

Photo Log



Photo Log 2013 Site-Wide Inspection and Soil Cover Monitoring West Nyack Orange & Rockland, West Nyack, NY



Photo Log 2013 Site-Wide Inspection and Soil Cover Monitoring West Nyack Orange & Rockland, West Nyack, NY



Photo Log 2013 Site-Wide Inspection and Soil Cover Monitoring West Nyack Orange & Rockland, West Nyack, NY





Photo Log 2013 Site-Wide Inspection and Soil Cover Monitoring West Nyack Orange & Rockland, West Nyack, NY



Photo Log 2013 Site-Wide Inspection and Soil Cover Monitoring West Nyack Orange & Rockland, West Nyack, NY



Photo Log 2013 Site-Wide Inspection and Soil Cover Monitoring West Nyack Orange & Rockland, West Nyack, NY



Photo Log 2013 Site-Wide Inspection and Soil Cover Monitoring West Nyack Orange & Rockland, West Nyack, NY



Photo Log 2013 Site-Wide Inspection and Soil Cover Monitoring West Nyack Orange & Rockland, West Nyack, NY



Photo Log 2013 Site-Wide Inspection and Soil Cover Monitoring West Nyack Orange & Rockland, West Nyack, NY



Photo Log 2013 Site-Wide Inspection and Soil Cover Monitoring West Nyack Orange & Rockland, West Nyack, NY



Photo Log 2013 Site-Wide Inspection and Soil Cover Monitoring West Nyack Orange & Rockland, West Nyack, NY



Photo Log 2013 Site-Wide Inspection and Soil Cover Monitoring West Nyack Orange & Rockland, West Nyack, NY





Appendix B

Emergency Generator Installation Summary Report



February 13, 2018

Ms. Lexy Servis New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation Remedial Bureau C 625 Broadway, Albany, NY 12233-7014

Subject: Emergency Generator Installation Summary Report West Nyack Operating Center 180 West Nyack Road, West Nyack, NY NYSDEC Site # 344014

Dear Ms. Servis:

Below is a letter report with associated attachments for the work performed at the West Nyack Operating Center (Site # 344014) to install an emergency generator for the facility. This letter report was prepared in compliance with the 2012 Site Management Plan. In this report and associated attachments, Orange & Rockland (ORU) is providing a summary of the work for the NYSDEC with photos documenting the installation, analytical results of the excavated/removed soil, and disposal manifests.

Please do not hesitate to contact me with any questions.

Sincerely yours,

Maribeth McCormick Technical Manager – Remediation Environmental Services

Attachments: Attachment 1 – Figure 1 Attachment 2 – Analytical Results Attachment 3 – Waste Manifests Attachment 4 – Photos Attachment 5 – Backfill Documentation



Scope of Work

ORU, and their contractor, Level One, has constructed and installed a 200kW emergency natural gas generator at the West Nyack Operating Center (Site). See Figure 1 included as Attachment 1. The installation included:

- Construction of a 17 foot by 13 foot foundation platform with columns and footings extending to 48 inches below grade
- Below ground electric service (located approximately 36 inches below grade)
- Below ground natural gas service supply line (approximately 100 feet from main at between 36-48 inches below grade)

The foundation platform supports the new 200 kW natural gas generator, and the service switch and meter. Gas service to the generator was installed by ORU personnel from the gas main on West Nyack Road to the generator at approximately 36-48 inches below grade. Electric service is below grade at approximately 36 inches below grade. A splice box was installed in front of the existing transformer to splice the secondary power to supply the facility. The splice box was installed at approximately 48-60 inches below grade. New secondary cables are supplied between the transformer and the new service switch and the facility.

Materials Excavated

To complete the work described above, ORU and Level One needed to excavate and dispose of approximately 116.99 tons of soil. This soil was removed, wrapped in 6 mil poly-sheeting, staged on site, sampled for waste characterization, and transported to Clean Earth of Carteret for disposal. Copies of the analytical results are included in Attachment 2. Copies of the completed waste manifests are included as Attachment 3.

Summary of Observations and Analytical Results

As the work progressed, the soil excavated was inspected (via sight and smell) for signs of contamination or impacts related to historical operations at the site. No impacts were observed. Photos of the excavation, excavated material, and associated site work are included as Attachment 4. Once the equipment was installed, all open areas were backfilled with item 4 stone, and then paved to match the existing surface. Documentation of the final backfill material is provided in Attachment 5.

Conclusions

Based on the observations made during this project, ORU believes that no additional work or monitoring is needed at this time.



Attachment 1 – Figure 1

West Nyack Generator





Attachment 2 - Analytical Results





NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01 S tate Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

October 10, 2017

Mr. Chad Mazenko Clean Earth Inc. 334 S. Warminster Rd Hatboro, PA 19040

Certificate of Analysis

Project Name:	2017-West Nyack REV2	Workorder:	2265955	
Purchase Order:	301-30595	Workorder ID:	2017-West Nyack REV2	

Dear Mr. Mazenko:

Enclosed are the analytical results for samples received by the laboratory on Tuesday, October 3, 2017.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Ms. Susan J Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Environmental.

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Ms. Susan J Scherer

Project Coordinator

ALS Environmental Laboratory Locations Across North America

Canada: Burlington + Calgary + Centre of Excellence + Edmonton + Fort McMurray + Fort St. John + Grande Praírie + London + Mississauga + Richmond Hill + Saskatoon + Thunder Bay Vancouver Waterloo + Winnipeg + Yeilowknife United States: Cincinnati + Everett + Fort Collins + Holland + Houston + Middletown + Salt Lake City + Spring City + York Mexico: Monterrey





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 S tate Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2265955 2017-West Nyack REV2

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2265955001	WN-Comp-1	Solid	10/3/2017 09:00	10/3/2017 20:15	Collected by Client
2265955002	WN-G-1	Solid	10/3/2017 09:10	10/3/2017 20:15	Collected by Client

ALS Environmental Laboratory Locations Across North America

Canada: Burlington + Calgary + Centre of Excellence + Edmonton + Fort McMurray + Fort St. John + Grande Prairie + London + Mississauga + Richmond Hill + Saskatoon + Thunder Bay Vancouver Waterloo + Winnipeg + Yellowknife United States: Cincinnati + Everett + Fort Collins + Holland + Houston + Middletown + Salt Lake City + Spring City + York Mexico: Monterrey





NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

SAMPLE SUMMARY

Workorder: 2265955 2017-West Nyack REV2

Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
- -- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- --- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- -- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incurbator and
- the "Analyzed" value is the date/time out the incubator.

Standard Acronyms/Flags

- J Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
- U Indicates that the analyte was Not Detected (ND)
- N Indicates presumptive evidence of the presence of a compound
- MDL Method Detection Limit
- PQL Practical Quantitation Limit
- RDL Reporting Detection Limit
- ND Not Detected indicates that the analyte was Not Detected at the RDL
- Cntr Analysis was performed using this container
- RegLmt Regulatory Limit
- LCS Laboratory Control Sample
- MS Matrix Spike
- MSD Matrix Spike Duplicate
- DUP Sample Duplicate
- %Rec Percent Recovery
- RPD Relative Percent Difference
- LOD DoD Limit of Detection
- LOQ DoD Limit of Quantitation
- DL DoD Detection Limit
- Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
- (S) Surrogate Compound
- NC Not Calculated
- * Result outside of QC limits

ALS Environmental Laboratory Locations Across North America

Canada: Burlington + Calgary + Centre of Excellence + Edmonton + Fort McMurray + Fort St. John + Grande Prairie + London + Mississauga + Richmond Hill + Saskatoon + Thunder Bay Vancouver Waterloo + Winnipeg + Yellowknife United States: Cincinnati + Everett + Fort Collins + Holland + Houston + Middletown + Salt Lake City + Spring City + York Mexico: Monterrey





Sample ID: WN-Comp-1

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP : A2LA 0818.01 S tate Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

PROJECT SUMMARY

Workorder: 2265955 2017-West Nyack REV2

Sample Comments

Lab ID: 2265955001

Sample Type: SAMPLE

This sample was analyzed at a dilution in the 8082 PCB analysis due to the level of Aroclor detected. Reporting limits were adjusted accordingly.

ALS Environmental Laboratory Locations Across North America

Canada: Burlington - Calgary - Centre of Excellence - Edmonton - Fort McMurray - Fort St. John - Grande Prairie - London - Mississauga - Richmond Hill - Saskatoon - Thunder Bay Vancouver Waterloo - Winnipeg - Yellowknife United States: Cincinnati - Everett - Fort Collins - Holland - Houston - Middletown - Salt Lake City - Spring City - York Mexico: Monterrey





NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

ANALYTICAL RESULTS

Workorder: 2265955 2017-West Nyack REV2

Lab ID: Sample ID:	2265955001 WN-Comp-1					Date Collected: Date Received:	10/3/2017 09 10/3/2017 20	:00 :15	Matrix: S	Solid	
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	By	Cntr
SEMIVOLATI	LES										
Acenaphthene	e	ND		ug/kg	56.6	SW846 8270D	10/5/17 04:00	JTH	10/7/17 19:18	CGS	А
Acenaphthyle	ne	519		ug/kg	56.6	SW846 8270D	10/5/17 04:00	JTH	10/7/17 19:18	CGS	А
Anthracene		220		ug/kg	56.6	SW846 8270D	10/5/17 04:00	JTH	10/7/17 19:18	CGS	А
Benzo(a)anthi	racene	940		ug/kg	56.6	SW846 8270D	10/5/17 04:00	JTH	10/7/17 19:18	CGS	А
Benzo(a)pyrei	ne	996		ug/kg	56.6	SW846 8270D	10/5/17 04:00	JTH	10/7/17 19:18	CGS	А
Benzo(b)fluora	anthene	1260		ug/kg	56.6	SW846 8270D	10/5/17 04:00	JTH	10/7/17 19:18	CGS	А
Benzo(g,h,i)pe	erylene	970		ug/kg	56.6	SW846 8270D	10/5/17 04:00	JTH	10/7/17 19:18	CGS	А
Benzo(k)fluora	anthene	433		ug/kg	56.6	SW846 8270D	10/5/17 04:00	JTH	10/7/17 19:18	CGS	А
Chrysene		1110		ug/kg	56.6	SW846 8270D	10/5/17 04:00	JTH	10/7/17 19:18	CGS	А
Dibenzo(a,h)a	nthracene	243		ug/kg	56.6	SW846 8270D	10/5/17 04:00	JTH	10/7/17 19:18	CGS	А
Fluoranthene		1180		ug/kg	56.6	SW846 8270D	10/5/17 04:00	JTH	10/7/17 19:18	CGS	А
Fluorene		75.5		ug/kg	56.6	SW846 8270D	10/5/17 04:00	JTH	10/7/17 19:18	CGS	А
Indeno(1,2,3-c	d)pyrene	870		ug/kg	56.6	SW846 8270D	10/5/17 04:00	JTH	10/7/17 19:18	CGS	А
Naphthalene		164		ug/kg	56.6	SW846 8270D	10/5/17 04:00	JTH	10/7/17 19:18	CGS	А
Phenanthrene		590		ug/kg	56.6	SW846 8270D	10/5/17 04:00	JTH	10/7/17 19:18	CGS	А
Pyrene		2270		ug/kg	56.6	SW846 8270D	10/5/17 04:00	JTH	10/7/17 19:18	CGS	А
Surrogate Rec	overies	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
2-Fluorobipher	nyl (S)	76.3		%	40 - 110	SW846 8270D	10/5/17 04:00	JTH	10/7/17 19:18	CGS	A
Nitrobenzene-	d5 (S)	71.4		%	38 - 112	SW846 8270D	10/5/17 04:00	JTH	10/7/17 19:18	CGS	А
Terphenyl-d14	(S)	87.3		%	45 - 126	SW846 8270D	10/5/17 04:00	JTH	10/7/17 19:18	CGS	А
PCBs											
Total Polychlor Biphenyl	inated	2.9		mg/kg	0.18	SW846 8082A	10/5/17 02:00	JTH	10/6/17 00:40	EGO	А
Aroclor-1016		ND		mg/kg	0.18	SW846 8082A	10/5/17 02:00	JTH	10/6/17 00:40	EGO	А
Aroclor-1221		ND		mg/kg	0.18	SW846 8082A	10/5/17 02:00	JTH	10/6/17 00:40	EGO	А
Aroclor-1232		ND		mg/kg	0.18	SW846 8082A	10/5/17 02:00	JTH	10/6/17 00:40	EGO	А
Aroclor-1242		ND		mg/kg	0.18	SW846 8082A	10/5/17 02:00	JTH	10/6/17 00:40	EGO	А
Aroclor-1248		2.2		mg/kg	0.18	SW846 8082A	10/5/17 02:00	JTH	10/6/17 00:40	EGO	А
Aroclor-1254		0.46		mg/kg	0.18	SW846 8082A	10/5/17 02:00	JTH	10/6/17 00:40	EGO	А
Aroclor-1260		0.23		mg/kg	0.18	SW846 8082A	10/5/17 02:00	JTH	10/6/17 00:40	EGO	А
Aroclor-1262		ND		mg/kg	0.18	SW846 8082A	10/5/17 02:00	JTH	10/6/17 00:40	EGO	А
Aroclor-1268		ND		mg/kg	0.18	SW846 8082A	10/5/17 02:00	JTH	10/6/17 00:40	EGO	А
Surrogate Rec	overies	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
Decachlorobip	nenyls (S)	60.6	-	%	49 - 115	SW846 8082A	10/5/17 02:00	JTH	10/6/17 00:40	EGO	A
Tetrachloro-m-	xylene (S)	68.8		%	27 - 137	SW846 8082A	10/5/17 02:00	JTH	10/6/17 00:40	EGO	A
WET CHEMIS	TRY										

ALS Environmental Laboratory Locations Across North America

Canada: Burlington + Calgary + Centre of Excellence + Edmonton + Fort McMurray + Fort St. John + Grande Prairie + London + Mississauga + Richmond Hill + Saskatoon + Thunder Bay Vancouver Waterloo + Winnipeg + Yellowknife United States: Cincinnati + Everett + Fort Collins + Holland + Houston + Middletown + Salt Lake City + Spring City + York Mexico: Monterrey





NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

ANALYTICAL RESULTS

Workorder: 2265955 2017-West Nyack REV2

Lab ID: Sample ID:	2265955001 WN-Comp-1					Date Collected Date Received	: 10/3/2017 09:00 : 10/3/2017 20:15	Matrix:	Solid	
Parameters		Results	Flag	Units	RDL	Method	Prepared By	/ Analyzed	Ву	Cntr
Corrosivity as	pН	8.01	3,4	pH_Units		SW846 9045D		10/7/17 05:58	MSA	A
Cyanide, Rea	ctive	ND		ppm	10	SW-846 7.3CN	10/7/17 11:00 AF	HI 10/8/17 10:28	кхк	А
lgnitability		Not ignitable	2			SW846 1030		10/9/17 12:15	SDL	А
Moisture		14.0		%	0.1	S2540G-11		10/4/17 11:05	AXD	А
Sulfide, React	ive	ND	1	ppm	6.2	SW846 7.3	10/7/17 11:00 AH	l 10/7/17 16:45	AHI	А
Total Solids		86.0		%	0.1	S2540G-11		10/4/17 11:05	AXD	А
METALS										
Arsenic, Total		5.8		mg/kg	0.87	SW846 6020A	10/5/17 07:33 JT	P 10/5/17 15:39	JTP	A2
Barium, Total		97.2		mg/kg	1.5	SW846 6020A	10/5/17 07:33 JT	P 10/5/17 15:39	JTP	A2
Cadmium, Tot	al	0.41		mg/kg	0.29	SW846 6020A	10/5/17 07:33 JT	P 10/5/17 15:39	JTP	A2
Chromium, To	tal	17.9		mg/kg	0.58	SW846 6020A	10/5/17 07:33 JT	P 10/5/17 15:39	JTP	A2
Lead, Total		151		mg/kg	0.58	SW846 6020A	10/5/17 07:33 JT	P 10/5/17 15:39	JTP	A2
Mercury, Total		0.23		mg/kg	0.057	SW846 7471B	10/4/17 11:15 AX	C 10/4/17 13:19	AXC	A1
Selenium, Tota	al	ND		mg/kg	1.5	SW846 6020A	10/5/17 07:33 JT	P 10/5/17 15:39	JTP	A2
Silver, Total		ND		mg/kg	0.58	SW846 6020A	10/5/17 07:33 JT	P 10/5/17 15:39	JTP	A2
TCLP METAL	S									
Arsenic, Total		ND		mg/L	0.14	SW846 6010C	10/10/17 03:55 LX	C 10/10/17 11:17	MNP	A3
Barium, Total		ND		mg/L	2.8	SW846 6010C	10/10/17 03:55 LX	C 10/10/17 11:17	MNP	A3
Cadmium, Tota	al	ND		mg/L	0.011	SW846 6010C	10/10/17 03:55 LX	C 10/10/17 11:17	MNP	A3
Chromium, Tot	al	ND		mg/L	0.028	SW846 6010C	10/10/17 03:55 LX	C 10/10/17 11:17	MNP	A3
Lead, Total		ND		mg/L	0.033	SW846 6010C	10/10/17 03:55 LX	C 10/10/17 11:17	MNP	A3
Mercury, Total		ND		mg/L	0.050	SW846 7470A	10/10/17 08:40 AX	C 10/10/17 13:47	AXC	A4
Selenium, Tota	t	ND		mg/L	0.11	SW846 6010C	10/10/17 03:55 LX	C 10/10/17 11:17	MNP	A3
Silver, Total		ND		mg/L	0.022	SW846 6010C	10/10/17 03:55 LX	C 10/10/17 11:17	MNP	A3

Schar Risan Ms. Susan J Scherer

Project Coordinator

ALS Environmental Laboratory Locations Across North America

Canada: Burlington - Calgary - Centre of Excellence - Edmonton - Fort McMurray - Fort St. John - Grande Prairie - London - Mississauga - Richmond Hill - Saskatoon - Thunder Bay Vancouver Waterloo - Winnipeg - Yellowknife United States: Cincinnati - Everett - Fort Collins - Holland - Houston - Middletown - Salt Lake City - Spring City - York Mexico: Monterrey





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 S tate Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2265955 2017-West Nyack REV2

Lab ID: 22659 Sample ID: WN-G	955002 i-1					Date Collected: Date Received:	10/3/2017 09 10/3/2017 20	:10 :15	Matrix: S	Solid	
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
PETROLEUM HC's											
Gasoline Range Orga	inics I	ND		ug/kg	9770	SW846 8015D	10/4/17 06:55	DD	10/5/17 00:14	DD	А
TPH - DRO C10-C44	:	38.4		mg/kg	11.7	SW846 8015D	10/4/17 16:55	JXD	10/5/17 17:14	BS	A
Surrogate Recoveries	; I	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
o-Terphenyl (S)	4	13.3		%	38 - 118	SW846 8015D	10/4/17 16:55	JXD	10/5/17 17:14	BS	A
Surrogate Recoveries	: /	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
a,a,a-Trifluorotoluene	(S) ´	24		%	72 - 134	SW846 8015D	10/4/17 06:55	DD	10/5/17 00:14	DD	A
VOLATILE ORGANIC	s										
Acetone	١	١D		ua/ka	9.6	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17.02	TMP	A2
Benzene	٢	١D		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
Bromochloromethane	1	1D		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
Bromodichloromethan	e N	D		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
Bromoform	١	ID		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
Bromomethane	Ν	I D		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
2-Butanone	Ν	ID		ug/kg	9.6	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
Carbon Disulfide	Ν	ID		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
Carbon Tetrachloride	Ν	D		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
Chlorobenzene	N	ID		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
Chlorodibromomethan	e N	ID		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
Chloroethane	Ν	ID		ug/kg	4.8	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
Chloroform	N	ID		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
Chloromethane	N	ID		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
Cyclohexane	N	D		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
1,2-Dibromo-3- chloropropane	Ν	D		ug/kg	4.8	SW846 8260B	10/4/17 06:56	ТМР	10/4/17 17:02	ТМР	A2
1,2-Dibromoethane	N	D		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
1,2-Dichlorobenzene	N	D		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
1,3-Dichlorobenzene	N	D		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
1,4-Dichlorobenzene	N	D		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
Dichlorodifluoromethar	ne N	D		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
1,1-Dichloroethane	N	D		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
1,2-Dichloroethane	N	D		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
1,1-Dichloroethene	N	D		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
cis-1,2-Dichloroethene	N	D		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
trans-1,2-Dichloroether	ne N	D		ug/kg	1.9	SW846 8260B	10/4/17 06:56	ТМР	10/4/17 17:02	TMP	A2
1,2-Dichloropropane	N	D		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2
cis-1,3-Dichloropropen	e N	D		ug/kg	1.9	SW846 8260B	10/4/17 06:56	ТМР	10/4/17 17:02	TMP	A2

ALS Environmental Laboratory Locations Across North America

Canada: Burlington + Calgary + Centre of Excellence + Edmonton + Fort McMurray + Fort St. John + Grande Prairie + London + Mississauga + Richmond Hill + Saskatoon + Thunder Bay Vancouver Waterloo + Winnipeg + Yellowknife United States: Cincinnati + Everett + Fort Collins + Holland + Houston + Middletown + Salt Lake City + Spring City + York Mexico: Monterrey





NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

ANALYTICAL RESULTS

Workorder: 2265955 2017-West Nyack REV2

Lab ID: 2265955 Sample ID: WN-G-1	5002				Date Collected: Date Received:	10/3/2017 09 10/3/2017 20	:10 :15	Matrix: S	Solid		
Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	By	Cntr	
trans-1,3-Dichloroprope	ne ND		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
1,4-Dioxane	ND		ug/kg	71.8	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
Ethylbenzene	ND		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
Freon 113	ND		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
2-Hexanone	ND		ug/kg	9.6	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
Isopropylbenzene	ND		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
Methyl acetate	ND		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
Methyl cyclohexane	ND		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
Methyl t-Butyl Ether	ND	4,5	ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
4-Methyl-2- Pentanone(MIBK)	ND		ug/kg	9.6	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
Methylene Chloride	12.3	1,2, 3	ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
Styrene	ND		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
1,1,2,2-Tetrachloroethan	e ND		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
Tetrachloroethene	ND		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
Toluene	ND		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
Total Xylenes	ND		ug/kg	5.7	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
1,2,3-Trichlorobenzene	ND		ug/kg	4.8	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
1,2,4-Trichlorobenzene	ND		ug/kg	4.8	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
1,1,1-Trichloroethane	ND		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
1,1,2-Trichloroethane	ND		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
Trichloroethene	ND		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
Trichlorofluoromethane	ND		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
Vinyl Chloride	ND		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
o-Xylene	ND		ug/kg	1.9	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
mp-Xylene	ND		ug/kg	3.8	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr	
1,2-Dichloroethane-d4 (S	5) 94.1		%	56 - 124	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
4-Bromofluorobenzene (S) 92.8		%	51 - 128	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
Dibromofluoromethane (S) 109		%	62 - 123	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
Toluene-d8 (S)	89.8		%	59 - 131	SW846 8260B	10/4/17 06:56	TMP	10/4/17 17:02	TMP	A2	
WET CHEMISTRY											
Moisture	10.4		%	0.1	S2540G-11			10/4/17 11:05	AXD	А	
Total Solids	89.6		%	0.1	S2540G-11			10/4/17 11:05	AXD	А	

ALS Environmental Laboratory Locations Across North America

Canada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay Vancouver Waterloo · Winnipeg · Yellowknife United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York Mexico: Monterrey





NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

ANALYTICAL RESULTS

Workorder: 2265955 2017-West Nyack REV2

Lab ID: Sample ID:	2265955002 WN-G-1					Date Collected: 10/3/2017 09:10 Date Received: 10/3/2017 20:15				Solid		
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	By	Cntr	

J. Scharr Sic. Ms. Susan J Scherer

Project Coordinator

ALS Environmental Laboratory Locations Across North America

Canada: Burlington - Calgary - Centre of Excellence - Edmonton - Fort McMurray - Fort St. John - Grande Prairie - London - Mississauga - Richmond Hill - Saskatoon - Thunder Bay Vancouver Waterloo - Winnipeg - Yellowknife United States: Cincinnati - Everett - Fort Collins - Holland - Houston - Middletown - Salt Lake City - Spring City - York Mexico: Monterrey




34 Dogwood Lane Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430 www.alsglobal.com

NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

ANALYTICAL RESULTS

Workorder: 2265955 2017-West Nyack REV2

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2265955001	1	WN-Comp-1	SW846 7.3	Sulfide, Reactive
The lack of homo	geneity i	n the sample caused the repli	cate analysis of this analyte to exceed	the established control limits for precision.
2265955001	2	WN-Comp-1	SW846 1030	Ignitability
According to Pa/L	JSEPA re	egulations, this sample is not	considered to be ignitable. (Ref 40 CFF	R 261.21)
2265955001	3	WN-Comp-1	SW846 9045D	Corrosivity as pH
The corrosivity ar of collection, and	alysis is are there	an "analyze immediately" ana efore analyzed outside of the	alysis. Parameters identified as "analyz method holding time when analyzed in	e immediately" require analysis within 15 minutes the laboratory.
2265955001	4	WN-Comp-1	SW846 9045D	Corrosivity as pH
The solid pH mea	sured in	water was 8.005 at 20.1 degr	rees C.	
2265955002	1	WN-G-1	SW846 8260B	Methylene Chloride
The Method Blan	k for met	hod SW846 8260B reported a	a value greater than the reporting level	for the analyte Methylene Chloride.
2265955002	2	WN-G-1	SW846 8260B	Methylene Chloride
The QC sample ty reported as 154 a	pe LCS	for method SW846 8260B wa ontrol limits were 68 to 133.	is outside the control limits for the analy	yte Methylene Chloride. The % Recovery was
2265955002	3	WN-G-1	SW846 8260B	Methylene Chloride
The QC sample ty reported as 153 a	/pe LCSI nd the co	D for method SW846 8260B v ontrol limits were 68 to 133.	vas outside the control limits for the ana	alyte Methylene Chloride. The % Recovery was
2265955002	4	WN-G-1	SW846 8260B	Methyl t-Butyl Ether
The QC sample ty reported as 124 a	pe LCS	for method SW846 8260B wa ontrol limits were 70 to 118.	is outside the control limits for the analy	yte Methyl t-Butyl Ether. The % Recovery was
2265955002	5	WN-G-1	SW846 8260B	Methyl t-Butyl Ether
The QC sample ty reported as 128 at	vpe LCSE	D for method SW846 8260B wontrol limits were 70 to 118.	vas outside the control limits for the ana	alyte Methyl t-Butyl Ether. The % Recovery was

ALS Environmental Laboratory Locations Across North America

Canada: Burlington + Calgary + Centre of Excellence + Edmonton + Fort McMurray + Fort St. John + Grande Prairie + London + Mississauga + Richmond Hill + Saskatoon + Thunder Bay Vancouver Waterloo + Winnipeg + Yellowknife United States: Cincinnati + Everett + Fort Collins + Holland + Houston + Middletown + Salt Lake City + Spring City + York Mexico: Monterrey

Laboratory Services, Inc. Environmental windustrial Hypene w Field Services prood Latrie w Middletown, PA 17057 w 717 944.5541 w Fex 71 Mame: Clean Earth, Inc.													-
ood Laine windoneower wincountum roporter winero derocod ood Laine windoneower, PA 17057 w 717 944 5541 w Farc 71 ame: Clean Earth, Inc.		A	INHS I	REQ(JEST AS MILS	FOR A		SIS DEVTH	E CI IEV	11	300 		of 1
lame: Clean Earth, Inc.	,944,1430	C		SAMPLE	R. INST	RUCTIO	IL NO SN	IE BACH			1		
		Contriner	Glass	Glass	Glass	Glass	Glass	Glass	Glass	Glass	Glass /	2 2 6 5 9 5 5 4 1 ty Receivin	(de.) gi
125 Middlesex Ave Carteret, NJ		Container Size	802	1602	16oz	1602	1602	16022	16cz	16oz	1602 /	Cooler Temp: 2 Cooler #:	
334 S. Warminster Rd. Halboro, PA 19049		Preservative	None	None	Norte	None	None	Noge	Ncne	None	None	Therm, ID 305 Y N	
t: Tehas Shah					ANA	YSES/MI	ETHOD RE	QUESTE	0			Custody Seals Present?	¥¢
¥. (215) 734-1400												(if present) Seals Intact?	5 5 5 2 5 4 10
Mame/#: West Nyack REV2			(W)				••	<u>,</u> ,	Marina: codis		a	Received on Ice?	e Bora
			1910								oins.	cociLabels Agree?	ova u Syseid Iraciu
T X Normal-Standard TAT is 10-12 business of	ays.		8) (27				١				() pu	Cont. in Good Cond.?	o papio wes e:
Rush-Subject to ALSI approval and surch	arges.		:0.0			A90	4HDX			(e ap	Correct Containers?	oened Meinw
equired: Approved by:			80/	S		Rel	i sie			Hq)	iliu2	Correct Sample Votumes/	cjuco
V No constanting cleanearthing	444		୦୪୭	.00A	1	isteM	staM	1	Atijio	(tivis	;-Alivi	Correct Preservation?	000
Sample Description/Location Sample		or C atrix) H91	Total	9.HA9	lsioT	4JOT	5804	ទររិពទ្យ	onoJ	React	Ship. Carrier: UPS / FedEx / UHL / Other Tracking #:	
(as it will appear on the tab report) Date	Time	W 9.		Ē	ter Numbe	r of Conta	iners Per S	ample or f	ield Resu	Its Below.		Sample/COC Comments	
5mp-1 10/3/17	1:00	c So	all and a second	US.	×	×	×	×	×	×	×		
1/2/12/01	01:	ගි ග	×	$ \prec$									
			1	ew/									
		_											
												ALSI Field Services: oPickup oL	abor
							T					 oComposite Sampling oRental Equip oOther: 	pment
Comments:				foj	jed By (ii	hitials/dal	dumet	\$ 1	347	5112	× s	itandard Special Processing State S	Samples
				Revier	ved By (ii	sitials/da	e/time)				ete Kable	LP-like USACE Coller	scted in
Relinquished By / Company Name	Date	Time		, Receiv	ed By I C	ompany	lame		Date	Time	o elive		≥:
Val D'AIJa /CET	0/3	9:00	240	NA <	Y	Ŷ	5	603	17	30		anal Rd EDD	2
Chinte m	2		4		-		Cod-	~	6-3	029	Reportable	to PADEP? Sample Disposal P	¥.
i dad	6.3	6100	9	X	BLB				50	Sion	Yes		ç
			10						-		EDDS: Ferm	at Tych- NJ EDD	
· G=Grab: C=Composite	.eM**	Irix - Al=A	ir, DW=Dri	nking Wat	ar, GW≑Gr	oundwater	O POIL O	L=Other Li	ould: SL=	Studge: S(D=Soil: WP=W	lipe: WwwsVYastewater	



Orange and Rockland Utilities, Inc. 390 West Route 59 Spring Valley NY 10977-5300 www.oru.com

Attachment 3 – Waste Manifests



Manifest # 1251373

GLOBAL JOB NUMBER	: 146768	FACILITY APPROVAL NUM	IBER: 17307140
Please Check One:			
Clean Earth of Carteret 24 Middlesex Avenue Carteret, NJ 07008 Ph: 732-541-8909	Clean Earth of Maryland 1469 Oak Ridge Place Hagerstown, MD 21740 Ph: 301-791-6220	Clean Earth of New Castle 94 Pyles Lane New Castle, DE 19720 Ph: 302-427-6633	Clean Earth of Greater Washington 6250 Dower House Road Upper Marlboro, MD 20772 Ph: 301-599-0939
Clean Earth of Philadelphia 3201 S. 61st Street Philadelphia, PA 19153 Ph: 215-724-5520	Clean Earth of North Jersey 115 Jacobus Avenue Kearny, NJ 07032 Ph: 973-344-4004	Clean Earth of Southeast Pennsylvania 7 Steel Road East Morrisville, PA 19067 Ph: 215-428-1700	Other
(Turne on Drint Olevalue)	Non-Hazaro	dous Material Manifest	
GENERATOR'S NAME & SI West Nup	TE ADDRESS: CK PRULECT	GROSS WEIGHT:	raids
· 766 West	Nypell Rel	TARE WEIGHT:	
GENERATOR'S PHONE	ct Ny 10	1994 Tons Yards	
GENERATOR STHONDS		Tons Yards	а П
GENERATOR'S CERTIFIC I hereby certify that the above is not a hazardous waste as de CFR Part 172 or any applicab for transportation according to Name: Signature:	ATION – Incomplete and/or u e named material does not com efined by 40 CFR Part 261 or a ole state law, has been fully and o all applicable state and feder uww	unsigned manifests will cause the load to be tain free liquid as defined by 40 CFR Part 2 any applicable state law, is not a DOT haza d accurately described above, classified, pa ral regulations. 	e delayed and/or rejected. 260.10 or any applicable state law, rdous substance as defined by 49 ckaged and is in proper condition <i>Antwelsent</i> /25/17
TRANSPORTERCompany:PrinceAddress:Image: State Stat	Transport st landing NI stro be or Print Clearly) eby certify that the above name	Phone Number: Truck # and License Plate: #55 SW Haulers Permit #: ned material was picked up at the site listed Date and Time: 10-24	2- <u>A5953</u> (applicable state permit #) above. 5- /7
DESTINATION			
I hereby certify Driver Signature:	that the above named material	was delivered without incident to the facily $Date and Time: 10-25$ terial has been accepted at the above reference $Date and Time: 10$	aced facility.

FACILITY

Clean Earth of Carteret	Ticket: 700000746766
24 Middlesex Avenue Carteret, NJ 07008 Ph: 7325418909 Fax: 7325418105	Date Time Scale In: 10/25/2017 09:50:27 CECSCALE1 Out: 10/25/2017 09:50:38
Manifest: 1251373	Lbs. Tns Gross: 67980.00 33.99
Vehicle ID: 07PRINCE512	Tare: 28100.00 14.05
Vehicle Permit:	Net: 39880.00 19.94
Customer: LEVEL ONE CONSTRUCTION SERVICES	Carrier: .
	Facility Approval#: 173071401
Generator: Orange and Rockland Utilities	Job Name: West Nyack Project
Gen Address: 390 West Route 59 Spring Valley, 07008 NY	Job Address: 766 West Nyack Road West Nyack, 10994 NY
Contaminate Type	Quantity Unit
Soil Treatment Type II	19.9400 TONS
Comment:	
Driver:	Facility:

Gibson, Barry

	$\frac{1}{8} = \frac{1}{8} \frac{1}{(2 - 1)} \frac{1}{(2 - 1)}$ (4)
CLEANEARTH	Manifest # 1251374
GLOBAL JOB NUMBER: 146768 FACILITY APPROVAL NU	mber: 173071401
Please Check One: Clean Earth of Maryland Clean Earth of Maryland 24 Middlesex Avenue 1469 Oak Ridge Place 94 Pyles Lane Carteret, NJ 07008 Hagerstown, MD 21740 New Castle, DE 19720 Ph: 732-541-8909 Ph: 301-791-6220 Ph: 302-427-6633	Clean Earth of Greater Washington 6250 Dower House Road Upper Mariboro, MD 20772 Pbi 201 500 0020
Clean Earth of PhiladelphiaClean Earth of North JerseyClean Earth of Southeast Pennsylvania3201 S. 61st Street115 Jacobus Avenue7 Steel Road EastPhiladelphia, PA 19153Kearny, NJ 07032Morrisville, PA 19067Ph: 215-724-5520Ph: 973-344-4004Ph: 215-428-1700	Other
Non-Hazardous Material Manifest	
(Type or Print Clearly)	
GENERATOR'S NAME & SITE ADDRESS: GROSS WEIGHT:	\wedge
Nest Nypell Project Tons Yards	30 yards
766 WESTNYPCR Rel TARE WEIGHT:	0
NEST NUPER NY 10994 Tons Yards	
GENERATOR'S PHONE: NET WEIGHT:	
Tons Yards	
DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION Non Hangedous Industrial foil	
GENERATOR'S CERTIFICATION - Incomplete and/or unsigned manifests will cause the load to h	o delawed and (an activated
I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT haza CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, part for transportation according to all applicable state and federal regulations. Name: <u>KEN STEWAR</u> Signature: <u>Date and Time</u> : <u>Material</u>	e delayed and/or rejected. 260.10 or any applicable state law, ardous substance as defined by 49 ackaged and is in proper condition <u>tendent</u> Facilities <u>125/17</u>
Company halla Dalca	
Address: UL- Case FO	
Driver: OSCO A CALLER CANOLIN NJ Truck # and License Plate: 600	<u>-38 pc</u>
(Type or Print Clearly) SW Haulers Permit #:	
- Litereby certify that the shove named material was nicked an at the site literal	(applicable state permit #)
Driver Signature: Deelee	2-25-17
DESTINATION	
I hereby certify that the above named material was delivered without incident to the facilit Driver Signature: Date and Time: Date and Time:	ity noted above. $7 - 25 - 17$
Authorized Signature: Date and Time: Date and Time:	25-10

CECSCALE1 Scale Tns 15.10 31.21 16.11 10:05:27 10:05:55 Time Job Address: 766 West Nyack Road West Nyack, 10994 NY Job Name: West Nyack Project Facility: Gibson, Barry Ticket: 700000746796 Lbs. 62420.00 30200.00 32220.00 Out: 10/25/2017 In: 10/25/2017 Facility Approval#: 173071401 Date TONS Unit Carrier: Gross: Net: Tare: Quantity 16.1100 Fax: 7325418105 Customer: LEVEL ONE CONSTRUCTION SERVICES Generator: Orange and Rockland Utilities Spring Valley, 07008 NY Gen Address: 390 West Route 59 07008 Vehicle ID: 07DELLA226 Clean Earth of Carteret 24 Middlesex Avenue Soil Treatment Type II Ph: 7325418909 Contaminate Type Carteret, NJ Driver: Vehicle Permit: Comment: Manifest:

ас. — ¥ Х		
•	4, ²	navný s R
		Manifest # 1251375
CLEANEARTH	5	
GLOBAL JOB NUMBER: 176768	FACILITY APPROVAL	NUMBER: <u>17307740</u>
Please Check One:		
Clean Earth of Carteret 24 Middlesex Avenue Carteret, NJ 07008 Ph: 732-541-8909 Clean Earth of Maryland 1469 Oak Ridge Place Hagerstown, MD 21740 Ph: 301-791-6220	☐ Clean Earth of New Castle 94 Pyles Lane New Castle, DE 19720 Ph: 302-427-6633	Clean Earth of Greater Washington 6250 Dower House Road Upper Marlboro, MD 20772 Ph: 301-599-0939
☐ Clean Earth of Philadelphia 3201 S. 61st Street☐ Clean Earth of North Jersey 115 Jacobus Avenue Kearny, NJ 07032 Ph: 215-724-5520☐ Clean Earth of North Jersey 115 Jacobus Avenue Kearny, NJ 07032 Ph: 973-344-4004	Clean Earth of Southeast Pennsylvar 7 Steel Road East Morrisville, PA 19067 Ph: 215-428-1700	sia Other
Non-Hazar	dous Material Manifest	
(Type or Print Clearly)		
WEST NUPCIC PROVER	GROSS WEIGHT:	20,008
766 West NUPCH R	L. TARE WEIGHT	20 4PS
West Nuper Ny 10	SG4 Tons Yards	
GENERATOR'S PHONE:	NET WEIGHT:	
NECONINETON OF SCIENCE	TonsYards	
Non Hozardous An	dustral foil	
	~ /	5
GENERATOR'S CERTIFICATION - Incomplete and/or u	insigned manifests will cause the load	to he delayed and/or rejected
I hereby certify that the above named material does not cont is not a hazardous waste as defined by 40 CFR Part 261 or a CFR Part 172 or any applicable state law, has been fully and for transportation according to all applicable state and feder Name: <u>KEN STEWAR</u> Signature: <u>Ken Maturat</u>	tain free liquid as defined by 40 CFR uny applicable state law, is not a DOT d accurately described above, classifie al regulations. 	Part 260.10 or any applicable state law, hazardous substance as defined by 49 ed, packaged and is in proper condition <u>securitevolent</u>
TRANSPORTER		
Company: PriNCE Transport Address: 145 Center Stlanding NI Driver: UTIO Castro (Type or Print Clearly) Liberely certify that the above name	Phone Number: Truck # and License Plate: SW Haulers Permit #:	512.A39532 (applicable state permit #)
Driver Signature:	Date and Time	25-/7
DESTINATION	Pare and Fasic:	
Liberehy certify that the above named material	and the state of the state	
Driver Signature:	Date and Time: $D - 2$	Tacility noted above. $25 - 12$
Authorized Signature:	erial has been accepted at the above re	Perferenced facility.
		-

FAC	ILI	TY	

CECSCALE1 Scale Tns 27.12 14.05 13.07 12:57:02 12:57:12 Time Job Address: 766 West Nyack Road West Nyack, 10994 NY Job Name: West Nyack Project Rendon, Adres Ticket: 700000747067 Lbs. 54240.00 28100.00 26140.00 Out: 10/25/2017 In: 10/25/2017 Facility Approval#: 173071401 Date TONS Unit Carrier: Facility: Gross: Tare: Net: Quantity 13.0700 Fax: 7325418105 Customer: LEVEL ONE CONSTRUCTION SERVICES Generator: Orange and Rockland Utilities Spring Valley, 07008 NY Gen Address: 390 West Route 59 07008 Vehicle ID: 07PRINCE512 Clean Earth of Carteret 24 Middlesex Avenue Manifest: 1251375 Soil Treatment Type II Ph: 7325418909 Contaminate Type Carteret, NJ Driver: Vehicle Permit: Comment:

	Manifest # 1251372
CLEANEADTH	
GLOBAL JOB NUMBER:	UMBER: 173071401
Please Check One:	
Clean Earth of CarteretClean Earth of MarylandClean Earth of New Castle24 Middlesex Avenue1469 Oak Ridge Place94 Pyles LaneCarteret, NJ 07008Hagerstown, MD 21740New Castle, DE 19720Ph: 732-541-8909Ph: 301-791-6220Ph: 302-427-6633	Clean Earth of Greater Washington 6250 Dower House Road Upper Mariboro, MD 20772 Ph; 301-599-0939
Clean Earth of PhiladelphiaClean Earth of North JerseyClean Earth of Southeast Pennsylvania3201 S. 61st Street115 Jacobus Avenue7 Steel Road EastPhiladelphia, PA 19153Kearny, NJ 07032Morrisville, PA 19067Ph: 215-724-5520Ph: 973-344-4004Ph: 215-428-1700	Other
(Type or Print Clearly)	
GENERATOR'S NAME & SITE ADDRESS: GROSS WEIGHT:	
West Nupel Pouret Drang Drands	25.10
266 hlast Alli on PROL TARENERIUS	
THE WEIGHT ALL TAGEN TARE WEIGHT:	
WSI NUPLIC FOR 10917 LIONS LYards	
GENERATOR'S PHONE:	
DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION	
100 Hazardous maushial god	2.
GENERATOR'S CERTIFICATION - incomplete and/or unsigned manifests will serves the load to	he delegad and/or rejected
Libershy and for the state of t	be delayed and/or rejected.
is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law is not a DOT by	ert 260.10 or any applicable state law,
CFR Part 172 or any applicable state law, has been fully and accurately described above, classified,	packaged and is in proper condition
for transportation according to all applicable state and federal regulations.	
Name: KEN STEWARI Title: Aug	einlendent
Signature: Ken Alewart Date and Time: 10/1:	25/17
TRANSPORTER	
TRANSPORTER Dell De Rete	
Company: <u>Ile / a KOCCA</u> Phone Number:	
Address: 45 CRN/PR LANDIN NJ Truck # and License Plate: 6	0638 DG
Driver: Oluptor OS Con SW Haulers Permit #:	•
(Type or Frint Clearly)	(applicable state permit #)
I hereby certify that the above named material was picked up at the site list	ted above.
Driver Signature: Date and Time:	10-23-17
DESTINATION	
I hereby certify that the shove named material was delivered without incident to the for	cility noted shove
Driver Signature: Driver Signature: Date and Time.	withy holed above.
Thereby certify that the above named material has been accented at the above refi	erenced facility
Authorized Signature: 117	-25-10

٠,

a 14,

CECSCALE1 Scale Tns 27.91 15.10 12.81 13:16:46 13:16:55 Time Job Address: 766 West Nyack Road West Nyack, 10994 NY Job Name: West Nyack Project Facility: Rendon, Adres Ticket: 700000747096 Lbs. 30200.00 55820.00 25620.00 Out: 10/25/2017 In: 10/25/2017 Facility Approval#: 173071401 TONS Date Unit Carrier: . Tare: Net: Gross: Quantity 12.8100 Fax: 7325418105 Customer: LEVEL ONE CONSTRUCTION SERVICES Generator: Orange and Rockland Utilities Spring Valley, 07008 NY Gen Address: 390 West Route 59 07008 Vehicle ID: 07DELLA226 Clean Earth of Carteret 24 Middlesex Avenue Manifest: 1251372 Soil Treatment Type II Ph: 7325418909 Contaminate Type Carteret, NJ Driver: Vehicle Permit: Comment:

Clean Earth of Carte	eret	Ticket: 70	00000755707	7	
24 Middlesex Avenu	e		Date	Time	Scale
Carteret, NJ	07008	In: 1	1/9/2017	10:49:51	CECSCALE1
Ph: 7325418909	Fax: 7325418105	Out: 1	1/9/2017	10:49:59	

			Lbs.	Tns
Manifest:	1134009	Gross:	49060.00	24.53
Vehicle ID:	07FF1	Tare:	28660.00	14.33
		Net:	20400.00	10.20
Vehicle Permit:				

Customer: LEVEL ONE CONSTRUCTION SERVICES

Facility Approval#: 173071401

Carrier: .

Generator: Orange and Rockland Utilities

Gen Address: 390 West Route 59 Spring Valley, 07008 NY Job Name: West Nyack Project

Job Address: 766 West Nyack Road West Nyack, 10994 NY

Contaminate Type	Quantity	Unit
Soil Treatment Type II	10.2000	TONS

Comment:

Driver:

Facility:

Gibson, Barry



Manifest # 1134009

Please Check One:			
Clean Earth of Carteret 24 Middlesex Avenue Carteret, NJ 07008	Clean Earth of Maryland 1469 Oak Ridge Place Hagerstown, MD 21740	Clean Earth of New Castle 94 Pyles Lane New Castle, DE 19720	Clean Earth of Greater Washingt 6250 Dower House Road Upper Marlboro, MD 20772
Ph: 732-541-8909	Ph: 301-791-6220	Ph: 302-427-6633	Ph: 301-599-0939
Clean Earth of Philadelphia 3201 S. 61st Street Philadelphia, PA 19153 Ph: 215-724-5520	Clean Earth of North Jersey 115 Jacobus Avenue Kearny, NJ 07032 Ph: 973-344-4004	Clean Earth of Southeast Pennsylvania 7 Steel Road East Morrisville, PA 19067 Ph: 215-428-1700	• Other
	Non-Hazar	dous Material Manifest	
(Type or Print Clearly)			
GENERATOR'S NAME &	SITE ADDRESS:	GROSS WEIGHT:	20,400
ILLECT IN	ALA KAL		- <u> </u>
WEST N/	ACKONY	Tons Yards	
JENERATOR'S PHONE:		NET WEIGHT:	
······································		Tons Yards	
GENERATOR'S CERTIFI	CATION – Incomplete and/or	unsigned manifests will cause the load	to be delayed and/or rejected
GENERATOR'S CERTIFI	CATION – Incomplete and/or ove named material does not con	unsigned manifests will cause the load ntain free liquid as defined by 40 CFR F	to be delayed and/or rejected. Part 260.10 or any applicable state law,
GENERATOR'S CERTIFI I hereby certify that the abc is not a hazardous waste as CFR Part 172 or any applic for transported in a second	CATION – Incomplete and/or ove named material does not con defined by 40 CFR Part 261 or able state law, has been fully an	unsigned manifests will cause the load atain free liquid as defined by 40 CFR F any applicable state law, is not a DOT ad accurately described above, classified	to be delayed and/or rejected. Part 260.10 or any applicable state law, hazardous substance as defined by 49 d, packaged and is in proper condition
GENERATOR'S CERTIFI I hereby certify that the abc is not a hazardous waste as CFR Part 172 or any applic for transportation according	CATION – Incomplete and/or ove named material does not con defined by 40 CFR Part 261 or able state law, has been fully an g to all applicable state and feder	unsigned manifests will cause the load tain free liquid as defined by 40 CFR F any applicable state law, is not a DOT ad accurately described above, classified ral regulations.	to be delayed and/or rejected. Part 260.10 or any applicable state law, hazardous substance as defined by 49 d, packaged and is in proper condition
GENERATOR'S CERTIFI I hereby certify that the abc is not a hazardous waste as CFR Part 172 or any applic for transportation according Vame:	<u>CATION</u> – Incomplete and/or ove named material does not con defined by 40 CFR Part 261 or able state law, has been fully an g to all applicable state and feder STEWART Sturbut	unsigned manifests will cause the load ntain free liquid as defined by 40 CFR F any applicable state law, is not a DOT ad accurately described above, classified ral regulations. Title:	to be delayed and/or rejected. Part 260.10 or any applicable state law, hazardous substance as defined by 49 d, packaged and is in proper condition eventement 1//g/1
GENERATOR'S CERTIFI I hereby certify that the abc is not a hazardous waste as CFR Part 172 or any applic for transportation according Vame:	<u>CATION</u> – Incomplete and/or ove named material does not con defined by 40 CFR Part 261 or able state law, has been fully an g to all applicable state and feder STEWART	unsigned manifests will cause the load tain free liquid as defined by 40 CFR F any applicable state law, is not a DOT id accurately described above, classified ral regulations. Title:	to be delayed and/or rejected. Part 260.10 or any applicable state law, hazardous substance as defined by 49 d, packaged and is in proper condition entember 1/19/17
GENERATOR'S CERTIFI I hereby certify that the abc is not a hazardous waste as CFR Part 172 or any applic for transportation according Name: Signature: RANSPORTER Company: T. T. T.	CATION – Incomplete and/or ove named material does not con defined by 40 CFR Part 261 or able state law, has been fully an g to all applicable state and feder STEWART Summer Summer Summer	unsigned manifests will cause the load ntain free liquid as defined by 40 CFR F any applicable state law, is not a DOT ad accurately described above, classified ral regulations. 	to be delayed and/or rejected. Part 260.10 or any applicable state law, hazardous substance as defined by 49 d, packaged and is in proper condition entember 1/19/17 TWO. TTHE 57300 ATT TIME ON 5
GENERATOR'S CERTIFI I hereby certify that the abc is not a hazardous waste as CFR Part 172 or any applic for transportation according Vame: Vame: VEW Signature: PARNSPORTER Company: Vates: VAT Vates: VAT	CATION – Incomplete and/or ove named material does not con defined by 40 CFR Part 261 or able state law, has been fully an g to all applicable state and feder STEWART Securat	unsigned manifests will cause the load ntain free liquid as defined by 40 CFR F any applicable state law, is not a DOT ad accurately described above, classified ral regulations. 	to be delayed and/or rejected. Part 260.10 or any applicable state law, hazardous substance as defined by 49 d, packaged and is in proper condition <u>eintendent</u> 1/19/17 TWO. TTHE 57300 ATT TIME ON 59 THE
GENERATOR'S CERTIFI I hereby certify that the aboris not a hazardous waste as CFR Part 172 or any applic for transportation according Vame: Image: Company: Company	CATION – Incomplete and/or ove named material does not con defined by 40 CFR Part 261 or able state law, has been fully an g to all applicable state and feder STEWART SUMMAN SUMMAN SUMMAN SUMMAN SUMMAN SUMMAN SUMMAN SUMMAN SUMMAN	unsigned manifests will cause the load tain free liquid as defined by 40 CFR F any applicable state law, is not a DOT ad accurately described above, classified ral regulations. Title:	to be delayed and/or rejected. Part 260.10 or any applicable state law, hazardous substance as defined by 49 d, packaged and is in proper condition <u>euvtendent</u> 1/19/17 Two. TTME 57300 ATT TIME ON 59 17461-7 (applicable state permit#)
GENERATOR'S CERTIFI I hereby certify that the abc is not a hazardous waste as CFR Part 172 or any applic for transportation according Name: Signature: Signature: CRANSPORTER Company: J. J. J. Company: Oriver: Transport of the second se	CATION – Incomplete and/or ove named material does not con defined by 40 CFR Part 261 or able state law, has been fully an g to all applicable state and feder STEWART Start S	unsigned manifests will cause the load tain free liquid as defined by 40 CFR F any applicable state law, is not a DOT ad accurately described above, classified ral regulations. Title: Date and Time: Date and Time: Phone Number: Truck # and License Plate: SW Haulers Permit #: ned material was picked up at the site li	to be delayed and/or rejected. Part 260.10 or any applicable state law, hazardous substance as defined by 49 d, packaged and is in proper condition eutember 1/19/17 TWO-TTIKE 57300 ATTIKE 57300 ATTIKE 1/19/17 (applicable state permit#) sted above
GENERATOR'S CERTIFI I hereby certify that the abc is not a hazardous waste as CFR Part 172 or any applic for transportation according Name: Signature: Company: I. F. Company:<	CATION – Incomplete and/or ove named material does not con defined by 40 CFR Part 261 or able state law, has been fully an g to all applicable state and feder STEWART SUMON SUMON SUSSEST Fype or Print Clearly) hereby certify that the above name	unsigned manifests will cause the load ntain free liquid as defined by 40 CFR F any applicable state law, is not a DOT ad accurately described above, classified ral regulations. 	to be delayed and/or rejected. Part 260.10 or any applicable state law, hazardous substance as defined by 49 d, packaged and is in proper condition <u>eintendent</u> 1/19/17 TWS. TTHE 5-7300 ATT THE ATT 6-7300 ATT THE ATT (applicable state permit#) sted above <u>UN9/2077</u>
GENERATOR'S CERTIFI I hereby certify that the abc is not a hazardous waste as CFR Part 172 or any applic for transportation according Jame: Vame: KEW Signature: Company: J. F. Company: <	CATION – Incomplete and/or ove named material does not con defined by 40 CFR Part 261 or able state law, has been fully an g to all applicable state and feder STEWART SUMON SUMON SUSSEST Fype or Print Clearly) hereby certify that the above name MMON	unsigned manifests will cause the load ntain free liquid as defined by 40 CFR F any applicable state law, is not a DOT ad accurately described above, classified ral regulations. 	to be delayed and/or rejected. Part 260.10 or any applicable state law, hazardous substance as defined by 49 d, packaged and is in proper condition <u>eintendent</u> 1/19/17 TWS. TTHE 5-7300 ATT TIME ON 5 5-7300 ATT TIME ON 5 (applicable state permit#) sted above <u>UN9/12077</u>
GENERATOR'S CERTIFI I hereby certify that the abc is not a hazardous waste as CFR Part 172 or any applic for transportation according Name: Vame:	CATION – Incomplete and/or ove named material does not condefined by 40 CFR Part 261 or able state law, has been fully and g to all applicable state and feder $STEWART$ Stewart	unsigned manifests will cause the load ntain free liquid as defined by 40 CFR F any applicable state law, is not a DOT ad accurately described above, classified ral regulations. 	to be delayed and/or rejected. Part 260.10 or any applicable state law, hazardous substance as defined by 49 d, packaged and is in proper condition <u>eintendent</u> 1/9/17 TWO. TTHE 5-7:00 ATT TIME ON 5 (applicable state permit#) sted above facility noted above
GENERATOR'S CERTIFI I hereby certify that the abc is not a hazardous waste as CFR Part 172 or any applic for transportation according Name: Xame: Yame: Xame: Yame:	CATION – Incomplete and/or ove named material does not con defined by 40 CFR Part 261 or able state law, has been fully an g to all applicable state and feder STEWART Standard SUNION SUSSE Type or Print Clearly) hereby certify that the above name of that the above named prateria	unsigned manifests will cause the load tain free liquid as defined by 40 CFR F any applicable state law, is not a DOT ad accurately described above, classified ral regulations. Title: Date and Time: Phone Number: Truck # and License Plate: SW Haulers Permit #: ned material was picked up at the site li MT Date and Time: 1 was delivered without incident to the Date and Time:	to be delayed and/or rejected. Part 260.10 or any applicable state law, hazardous substance as defined by 49 d, packaged and is in proper condition eintendent 1/19/17



Manifest # 1419826

GLOBAL JOB NUMBE	cr: 146768	FACILITY APPROVAL NU	JMBER: 173071663		
Please Check One:					
Zielean Earth of Carteret 24 Middlesex Avenue Carteret, NJ 07008 Ph: 732-541-8909	Clean Earth of Maryland 1469 Oak Ridge Place Hagerstown, MD 21740 Ph: 301-791-6220	Clean Earth of New Castle 94 Pyles Lane New Castle, DE 19720 Ph: 302-427-6633	Clean Earth of Greater Washington 6250 Dower House Road Upper Mariboro, MD 20772 Ph: 301-599-0939		
Clean Earth of Philadelphia 3201 S. 61st Street Philadelphia, PA 19153 Ph: 215-724-5520	Clean Earth of North Jersey 115 Jacobus Avenue Kearny, NJ 07032 Ph: 973-344-4004	 Clean Earth of Southeast Pennsylvania 7 Steel Road East Morrisville, PA 19067 Ph: 215-428-1700 	Other		
	Non-Hazar	dous Material Manifest			
(Type or Print Clearly)	ann an				
GENERATOR'S NAME &	SITE ADDRESS	GROSS WEIGHT:	- 1		
ORange + R	ockland Itili	ties Tons Yards	25 yards		
7/1 Alent.	nuck Road	TARE WEIGHT:			
West Maner	kMU. 10994	Tons Yards			
GENERATOR'S PHONE:		NET WEIGHT:			
	an far fan en ander e En ander fan en ander	Tons Yards			
DESCRIPTION OF MAT	ERIAL/SAMPLE ID AND LO Hengardous	Andustrial A	foil		
GENERATOR'S CERTIF	ICATION - Incomplete and/or	unsigned manifests will cause the load t	o be delayed and/or rejected.		
I hereby certify that the ab is not a hazardous waste as CFR Part 172 or any appli for transportation accordin	ove named material does not cor s defined by 40 CFR Part 261 or cable state law, has been fully ar ig to all applicable state and fede	ntain free liquid as defined by 40 CFR P any applicable state law, is not a DOT h and accurately described above, classified eral regulations.	art 260.10 or any applicable state law, nazardous substance as defined by 49 I, packaged and is in proper condition		
Name: SEN	STEWAR	Intle:	rincenden		
Signature: Ku	a Stewart	Date and Time:	12/12/11		
TRANSPORTER Company, PriNC Address: 145 CCN Driver: JULIO (E <u>I Er St landing N</u> <u>CaStro</u> (Type or Print Clearly) hereby certify that the above name	Phone Number: 78 Truck # and License Plate: 45 SW Haulers Permit #: med material was picked up at the site line	6-234-44-50 6-234-44-50 (applicable state permit #) sted above.		
Driver Sijanatura:		Date and Time: 12-1	<u> </u>		
DESTINATION					
I hereby cert Driver Signature:	ify that the above named materia	al was delivered without incident to the Date and Time: <u>12-1</u> Aterial has been accepted at the above re	facility noted above. 12 - 17 ferenced facility.		
Authorized Segnature: 12-12-D					

FS (010 2937

Clean Earth of Carteret 24 Middlesex Avenue Carteret, NJ 07000 Ph: 7325418909 Fax: 7325418105

Ticket: 700000774763

 Date
 Time
 Scale

 In:
 12/12/2017
 09:42:10
 CECSCALE1

 Out:
 12/12/2017
 09:42:17
 09:42:17

Lbs. Gross: 67260.00	Tare: 28260.00	Net: 39000.00	Carrier: .	Facility Approval#: 173071663 Job Name: O&R - West Nyack	Job Address: 766 West Nyack Roac West Nyack, 1099/ NY	Quantity Unit	19.5000 TONS		Facility: Gibson, Barry
Manifest: 1419826	Vehicle ID: 07PRINC501	Vehicle Permit:	Customer: LEVEL ONE CONSTRUCTION SERVICES	Generator: Orange and Rockland Utilities	Gen Address: 390 West Route 59 Spring Valley, 07008 NY	Contaminate Type	Soil Treatment Type II	Comment	Driver:

to Anna &

a	
0	
U	Manifest # 1419814
CLEANEA	
GLOBAL JOB NUMBE	R: 146768 FACILITY APPROVAL NUMBER: 173071663
Please Check One:	
Clean Earth of Carteret 24 Middlesex Avenue Carteret, NJ 07008 Pn: 732-541-8909	Clean Earth of MarylendClean Earth of New CastleClean Earth of Greater Washington1469 Oak Ridge Place94 Pyles Lane6250 Dower House RoadHagerstown, MD 21740New Castle, DE 19720Upper Marlboro, MD 20772Ph: 301-791-6220Ph: 302-427-6633Ph: 301-599-0939
Clean Earth of Philadelphia 3201 S. 61st Street Philadelphia, PA 19153 Philadelphia, PA 19153 Philadelphia, PA 19153	Clean Earth of North JerseyClean Earth of Southeast PennsylvaniaOther115 Jacobus Avenue7 Steel Road East7 Steel Road EastKearny, NJ 07032Morrisville, PA 19067Ph: 973-344-4004Ph: 215-428-1700
	Non-Hazardous Material Manifest
(Type or Print Clearly)	
GENERATOR'S NAME &	SITE ADDRESS: GROSS WEIGHT: Cockland Utility Tons Yards 25405
766 West	Myack Road TARE WEIGHT:
_West Mija	NET WEIGHT
GENERATOR'S PHOME:	Tons Yards
DESCRIPTION OF MAT	ERIAL/SAMPLE ID AND LOCATION Zardous Andustrial Soil
GENERATOR'S CERTIN There'ry certify that the ab is not a hazardous waste a CFR Part 172 or any appli for transportation accordin Name:	ICATION – Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected. ove named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 cable state law, has been fully and accurately described above, classified, packaged and is in proper condition og to all applicable state and federal regulations.
Signature: Ken	Atewait Date and Time: 12/12/17
TRANSPORCER	
Company Della R	plea Phone Number:
Addres of M. Coa /	<u>A AVE STATEM ISTAND</u> Truck # and License Plate: <u>190658 PC</u>
Driver: OSCOL	(Type or Print Clearly) Sw Haulers Permit #: (applicable state permit #)
	hereby certify that the above named material was picked up at the site listed above,
Driver Lignature:R	Date and Time: 12-12-14
DESTINATION	
hereby cer	tify that the above named material was delivered without incident to the facility noted above.
Driver Sienes de:	Date and Time:
Authoritised St mature:	Date and Time: 12/12/1
middays to 'm	

Fax: 7325418105 **Clean** Earth of Conteret 24 Midoles Call aret. N.J. 11 17 10 de

Manifest: 1419814

Vehicle ID: 07DELLA226

Vehicle Permit:

Customer: LEVEL ONE CONSTRUCTION SERVICES

Generator: Orange and Rockland Utilities

Spring Valley, 07008 NY Gen Address: 390 West Route 59

25.3600 Quantity Soil Treatment Type II Contaminate Type

Comment:

Driver.

Ticket: 700000774879

CECSCALE1 Scale 10:36:33 10:36:46 Time Outs 12/12/2017 Inc. 12/12/2017 0 1 1 0

Tns 40.46	15.10	25.36
Lbs. 80920.00	30200.00	50720.00
Gross:	Tare:	Net:

Carrier:

Facility Approval#: 173071663

Job Name: O&R - West Nyack

West Nyack, 10994 NY Job Address: 766 West Nyack Road

Facility:

TONS Unit

Gibson, Barry



Orange and Rockland Utilities, Inc. 390 West Route 59 Spring Valley NY 10977-5300 www.oru.com

Attachment 4 – Photos



Orange and Rockland Utilities, Inc. 390 West Route 59 Spring Valley NY 10977-5300 www.oru.com

Attachment 5 – Backfill Documentation

ESTIMATE

L1 Construction Management



	200	Estir	mate #	000112
Rifflard Inc		Date	e	10/18/2017
52 Plank Rd			40	
Napanoch, New	York 12458			
Phone: (845) 496 Email: rifflardinc Fax: (845) 786-10	5-7295 @gmail.com)85			

Description	Quantity	
Item 4	60.0	
Item 4 stone purchased from tilcon		
Trucking	6.0	
Hauling item 4 from tilcon to O&R West Nyack		_

Subtotal	
Total	an and a second and a second

Any questions please feel free to contact us.

INVOICE

TRUCKING & EXCAVATING

L1 Construction Management

Payment TermsDue upon receiptInvoice #000194Date12/13/2017

Rifflard Inc 52 Plank Rd Napanoch, New York 12458

Phone: (845) 496-7295 Email: rifflardinc@gmail.com Fax: (845) 786-1085

j
al
t

Summary

Paid

Amount Due

Any questions please feel free to contact us.



Appendix C

Photo Documentation

Appendix C Photo Documentation – August 2018 Site Inspection O&R West Nyack Operations Center



PHOTOGRAPH 1 New Pavement –Looking South, East of NYOC Building



PHOTOGRAPH 2 New Pavement –Looking North, East of NYOC Building

Appendix C Photo Documentation – August 2018 Site Inspection O&R West Nyack Operations Center



PHOTOGRAPH 3 New Pavement – West of Building Looking North



PHOTOGRAPH 4 Base of Northwestern Transmission Tower – Oil Stone Chips Present

Appendix C Photo Documentation – August 2018 Site Inspection O&R West Nyack Operations Center



PHOTOGRAPH 5 New Fence Installed Along North Western Fence Line



PHOTOGRAPH 6 Southwestern Side of Building – Oil Stone Chips Adjacent to Building

Appendix C Photo Documentation – August 2018 Site Inspection O&R West Nyack Operations Center



PHOTOGRAPH 7 New Emergency Generator Pavement Patch – Southwest side of Building



PHOTOGRAPH 8 Depression/Crack in Pavement Patch for New Emergency Generator

Appendix C Photo Documentation – August 2018 Site Inspection O&R West Nyack Operations Center



PHOTOGRAPH 9 Cracks in Concrete Floor of Garage on East Side of Building



PHOTOGRAPH 10 Pavement on Lot 48 – West of Fence-line, East of RR, looking South

Appendix C Photo Documentation – August 2018 Site Inspection O&R West Nyack Operations Center



PHOTOGRAPH 11 Pavement on Lot 48 – West of Fence-line, East of RR, looking South



Appendix D

Annual Inspection and Certification Checklist

Annual Site-Wide Inspection and Soil Cover System Monitoring Checklist

Site: West Nyack Orange and Rockland (WNOC) Address: 766 West Nyack Road, West Nyack, NY 10994

Date of Ins	spection: <u>8</u>	7/10	5	
Weather:	SUNNY	Itot	850	F
Inspector:	Kathleen Slimon			

Company: GEI Consultants, Inc., 455 Winding Brook Drive, Glastonbury, CT 06033

O&R Representative: Maribeth Milormick **General Site Conditions** Are there any new or removed structures: Yes ____ No XDoes the site have proper up keep: Yes____ No Evidence of unauthorized entry: Yes No X Damage to entrances/exits: Yes ____ No X Any illegally dumped materials: Yes ___ No X Any unusual odors: Yes ___ No X Are any monitoring wells opened or damaged: Yes No X

Engineering Control Systems

The site engineering control systems is a soil cap (composite cover system). Exposure to remaining contamination in soil/fill at the site is prevented by a soil cover system placed over the site. Following remedial actions, the excavated area was backfilled with a combination of clean fill and thermally-treated soils. An impermeable asphalt cap was then placed over the entire site. This cap consists of 12 inches of structural sub-base, 3 inches of binder course, and 1 ½ inches of wearing course placed in the excavated areas, and 3 inches of binder course and 1 ½ inches of wearing course placed over the majority of the remainder of the site. In the driveway areas which were already paved, Petro-Mats[®] were laid over the existing pavement and covered with approximately 1 ½ inches of wearing course. Additionally, several inches of oiled stone chips were placed beneath the transmission towers in the northernmost portion of the site, as well as in the areas immediately adjacent to the rear of the building in order to protect the integrity of the asphalt cap.

Note Integrity of: Asphalt covered roads: Good Cracks Holes Stain/Seepage
Concrete building slabs Good Cracks Holes Stain/Seepage Some minuter Cracks
Clean soil cover/cap: Good Cracks Holes Stain/Seepage some errosian an Stoffen
Was maintenance or repair of the capped areas conducted? (Yes) No repeared in Zoib - Approved by NYS DEC
Integrity of Security Fencing around the site: <u>Good - damapel</u> area worked in ZOI3 was repaired Hareh wegi kiked -

1

Institutional Controls (Site Restrictions)

The property may only be used for industrial or commercial use provided that the long-term Engineering and Institutional Controls included in the SMP are employed. (Yes No

The property may not be used for a higher level of use such as unrestricted or restricted residential use without additional remediation and amendment of the deed restriction, as approved by the NYSDEC. Residential use observed? Yes No

All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with this SMP.

Was excavation conducted on site? Yes No

Was the Excavation Work Plan followed? Ves No Were the CAMP and EHASP followed? Yes No

Was there any construction or other disturbances of the cap conducted on site? (Yes) Ask for documentation if yes.

The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use. Any potable/non-potable well usage?

The potential for vapor intrusion must be evaluated for any buildings developed in the area while groundwater impacts are still present and any potential impacts that are identified must be monitored or mitigated. New buildings in past year? Yes No

Was Soil Vapor Intrusion Sampling Conducted? Yes

Vegetable gardens and farming on the property are prohibited Observed? Yes

The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation of failure to comply with the SMP. Yes No ______

Groundwater Sampling

Was access granted to representatives of the Former Grant Hardware Facility Site for sampling?

2

No

-NO

Were monitoring well repairs, replacement or decommissioning required? Yes

Notifications Required Yes/No

60-day advance notice of any proposed changes in site use that are required under the terms of the Orders on Consent, 6NYCRR Part 375, and/or Environmental Conservation Law. Yes No

7-day advance notice of any proposed ground-intrusive activities pursuant to the Excavation Work Plan. Yes No

Notice within 48-hours of any damage or defect to the foundations structures that reduced or has the potential to reduce the effectiveness of the Engineering Control and likewise any action to be taken to mitigate the damage or defect. Yes No

Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of the Engineering Control in place at the site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public. Yes (No

Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs. Yes No

Any change in the ownership of the site or the responsibility for implementing this SMP will include the following notifications:

At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser has been provided with a copy of the Orders on Consent, and all approved work plans and reports, including this SMP. Yes (No

Within 15 days after the transfer of all or part of the site, the new owner's name, contact representative, and contact information will be confirmed in writing. Yes No Ask for documentation if yes.

Contingency Plan

In the event of an emergency condition impacting the Engineering Control or building, O&R will follow its existing emergency procedures and evacuation plan for this facility. As appropriate, the fire department and other emergency response group will be notified immediately by telephone of the emergency.

2

Did an emergency occur in the past year? Yes



Was the fire department or other emergency response group notified immediately? Yes No



Appendix E

Institutional and Engineering Controls Certification Form



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



Site Details Site No. 344014	Box 1	
Site Name Orange & Rockland Utilities Currently 766 West Nyack Rd Site Address: 180 West Nyack Road Zip Code: 10994 City/Town: West Nyack County: Rockland Site Acreage: 5.2		
Reporting Period: July 31, 2013 to July 31, 2018		
Inspection Performed on August 7, 2018	YES	NO
1 Is the information above correct?	л	X
If NO include handwritten above er en e concrete aboot	Ш	
If NO, include handwhiten above of on a separate sheet.		
 Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? 		¥
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?		X
	Box 2	
	YES	NO
 Is the current site use consistent with the use(s) listed below? Industrial 	X	
7. Are all ICs/ECs in place and functioning as designed?	X I	
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below ar DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.	nd	
A Corrective Measures Work Plan must be submitted along with this form to address the	ese iss	ues.

SITE NO. 344014		Box 3
Description of Ins	citutional Controls	look the store to
Farcel 65.05-2-43	Orange & Rockingd Litilities	Institutional Control
65.05-2-45	Orange & Rockinad Otanies	
Parcel 43 is not included in measures or in the SMP. Th Engineering Controls on Pa 43 is included in the deed ro	the remedial here are no arcel 43. Parcel estriction for	Landuse Restriction Monitoring Plan Site Management Plan
landuse restrictions and pro the use of groundwater.	phibition against	Ground Water Use Restriction
* Drahibitian against the		Soil Management Plan
*Lood use must be mail	use of groundwater without treatment.	
Land use must be mai		
* Soil Management Plan	must be followed	
* Cover must maintained	Orange & Rockland	
00.001		Landuse Restriction Soil Management Plan Monitoring Plan Site Management Plan Ground Water Use Restriction
* Prohibition against the	use of groundwater without treatment.	
* Land use must be mair	ntained as industrial	
* Soil Management Plan	must be followed	
* Cover must maintained	1	G
65.5-2-48	Orange & Rockland	Ground Water Use Restriction
		Landuse Restriction Soil Management Plan Monitoring Plan Site Management Plan
' Prohibition against the ι	use of groundwater without treatment.	
* Land use must be main	ntained as industrial	
* Soil Management Plan	must be followed	
* Cover must maintained		
		Box 4
Description of Eng	ineering Controls	
Parcel 35.05-2-43	Engineering Control	
There are no Engineering Co 43. Parcel 43 was not include remedial measures or in the S	ntrols on Parcel Fencing/Access Control- ed in the Cover System SMP	
5.05-2-47		
	Cover System Fencing/Access Control	
5.5-2-48		

Parcel

Engineering Control Cover System

	Box 5	
	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 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 and in accordance with the information procented in accurate and compare.	
	engineering practices, and the mormation presented is accurate and compete. YES NO	
	X	
	 or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all statements are true: Corrections noted in Box 3 and Box 4 above and as noted in Item (d) below. (a) the Institutional Control and/or 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; (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. 	
A	VES NO Corrections noted in Box 3 and Box 4 above and as noted in item (d) above IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue. Corrective Measures Work Plan must be submitted along with this form to address these issues.	
Si	ignature of Owner, Remedial Party or Designated Representative Date	
_		
---	---	----------------
	IC CERTIFICATIONS SITE NO 344014	
	Box 6	
	I certify that all information and statements in Boxes 1,2, and 3 are true. Understand that a talse	notes provided
	statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.	
	I Maribeth McCormick at <u>3 Old Chester Road, Goshen, NY 10924</u> print name print business address	
	am certifying as Orange and Rockland Utilities, Inc. (Owner or Remedial Party)	
	for the Site named in the Site Details Section of this form.	
	Mailuta Manuch Signature of Owner, Remedial Party, or Designated Representative Rendering Certification	

INITA ATULIA MUNIA	IC/EC	CERTIFI	CATIONS
--------------------	-------	---------	---------

Box 7

Professional Engineer Signature per the notes and corrections provided.

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

Kathleen F. Slimon, P.E. at 455 V	Winding Brook Dr., Suite 201, Glastonbury, CT 06033
print name	print business address
am certifying as a Professional Engineer for the _	Remedial Party
	(Owner or Remedial Party)
Signature of Professional Engineer, for the Owner Remedial Party, Rendering Certification	BLACK ANELY JORSTON OF BLACK ANELY JORSTON OF BLACK ANELY JORSTON OF